DOCUMENT RESUME

ED 480 617 PS 031 511

AUTHOR	Sherrod, Lonnie, Ed.; Brooks-Gunn, Jeanne, Ed.
TITLE	Social Policy Report, 2002.
INSTITUTION	Society for Research in Child Development.
ISSN	ISSN-1075-7031
PUB DATE	2002-00-00
NOTE	78p.; Volume 6, Numbers 1-4. For 2001 issues, see ED 458 020. Published quarterly.
AVAILABLE FROM	Society for Research in Child Development, University of Michigan, 3131 South State Street, Suite 302, Ann Arbor, MI 48108-1623 ($20, subscription for nonmembers; $5, single issue). Tel: 734-998-6578; Fax: 734-998-6569; e-mail: SRCD@umich.edu; Web site: http://www.srcd.org. For full text: http://www.srcd.org/spr.html.
PUB TYPE	Collected Works - General (020)
EDRS PRICE	EDRS Price MF01/PC04 Plus Postage.
DESCRIPTORS	*Children; Disabilities; Educational Policy; Emotional Development; Kindergarten; Parent Student Relationship; *Public Policy; Research Needs; School Entrance Age; *School Readiness; *Welfare Reform

ABSTRACT

This document is comprised of the four 2002 issues of a publication providing a forum for scholarly reviews and discussion of developmental research and implications for social policies affecting children. The topics featured in each of the issues are: (1) "The Effects of Welfare Reform Policies on Children" (Pamela A. Morris); (2) "At What Age Should Children Enter Kindergarten? A Question for Policy Makers and Parents" (Deborah Stipek); (3) "Emotions Matter: Making the Case for the Role of Young Children's Emotional Development for Early School Readiness" (C. Cybele Raver); and (4) "Towards an Understanding of the Impact of Welfare Reform on Children with Disabilities and Their Families: Setting a Research and Policy Agenda" (Elisa A. Rosman, Hirokazu Yoshikawa, and Jane Knitzer). Each issue contains references. (HTH)

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ED 480 617

Social Policy Report, 2002.

Volume 16, No. 1-4, 2002.

Lonnie Sherrod, Editor
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Social Policy Report

Giving Child and Youth Development Knowledge Away

Volume XVI, Number 1 2002

The Effects of Welfare Reform Policies on Children

Pamela A. Morris

Summary

Over the past 30 years, welfare and other public policies for families living in poverty have developed a primary objective of increasing parents' self-sufficiency by requiring and supporting employment, culminating in the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). This legislation gave states considerable latitude in designing their welfare policies. At the same time, however, there has been very little research on the effects of welfare policies on children to inform decisions policymakers are making. Fortunately, there now is consistent evidence from well-designed studies about whether promoting work among low-income single parents helps or hurts children, and under what conditions it does so. This policy report summarizes the results on children from a synthesis of nearly a dozen welfare experiments aimed at increasing the self-sufficiency of low-income parents.

The study finds that:

- Welfare policies that increase employment, but do not affect income, have few effects on children. These findings are consistent with the generally neutral effects of maternal employment for low income children found in the developmental literature, and should be reassuring to those concerned about the negative effects to children of requiring mothers to go to work.

- Welfare policies, when designed in ways that increase both parents' employment and income, appear to benefit elementary school children, particularly children's school achievement. The effects are small, but notable, analogous to increasing children's test scores from the 25th to the 30th percentile.

These findings present policymakers with a choice: either to implement policies that reduce welfare caseloads, increase employment and have limited effects on young children, with limited government costs or to implement policies that increase employment and income, and, in turn, benefit young children, with greater cost to the government.

One caution emerges, however: Emerging findings on adolescent children suggest that programs may be less beneficial for adolescents than for children in middle childhood, suggesting that the way in which programs affect children may be shaped by children's developmental stage. Adolescents were only examined systematically in two studies, but those studies suggested increased adolescent problem behavior (drinking, smoking, minor delinquency) and increased problems in school when parents move from welfare into employment.

These findings point to an effective role for the Temporary Assistance for Needy Families (TANF) surpluses, should they be maintained. For states that are interested in using welfare policy to improve children's school achievement, policies that supplement the earnings of low-income workers might be an important complement to programs aimed directly at improving the school outcomes of children.

Also in this issue: ***Special Commentary on the September 11th Tragedy, page 3***

A Publication of the Society for Research in Child Development

Article begins on page 4

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From the Editor

It is a pleasure to present results from the recent wave of welfare reform experiments. Pamela Morris, a developmental psychologist at Manpower Demonstration Research Corporation (MDRC), has focused on what these evaluations have to say about child well-being (or, might say have to say about how poor children are being affected by the requirements for their mothers to work). This is the second SPR in a series on children, work, and welfare. The first, written by Nancy Reichman and Sara McLanahan, reviewed findings from the welfare evaluations that required parental participation in work and skills training (although case management services were provided as well as sanctions for non compliance) in the late 1980s. The evaluations presented in the current SPR were conducted in the mid to late 1990s, around the time of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). The projects examine the effects of specific welfare reform policies implemented in a handful of states. They do not tell us about what is happening in each state nor to the vast majority of families affected by the 1996 Act. Instead, the report provides a synthesis of data from programs that had mandatory employment services, that provided earnings supplements, or that had stringent time limits on welfare receipt/return to work. In general, programs that provided earnings supplements had positive impacts on children while those without such supplements did not. Moving from welfare to work does not appreciably alter family income, with families continuing to exist around the poverty threshold. Morris urges policy makers to take such findings into account as the reauthorization of the PRWORA takes place in 2002. Lonnie Sherrod and I concur.

Jeanne Brooks-Gunn, Ph.D., Associate Editor
Virginia and Leonard Marx Professor,
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Special Commentary

"U.S. Attacked!"

Headline of *New York Times*, September 12, 2001

Children's Responses

The "From the Editors" box on the facing page addresses this issue of *The Social Policy Report*. However, as editors of a publication addressing social policy for children, youth and families, we felt that we had to comment on the incredible event of September 11 and the need for some concerted attention to the response of children and youth. As human beings and as citizens of the U.S. we have an obligation to address the needs of victims' families and to aid the country in its response to maintain our safety. Additionally, as developmental psychologists we have a responsibility to bring the information from our research to the nation's attempts to aid children in the aftermath of this catastrophe. We see at least four major areas of response: childhood bereavement, PTSD, intergroup attitudes and relationships, and civic engagement.

Childhood Bereavement. Many children have lost loved ones in this tragedy. We know quite a bit about bereavement in children, particularly about variability by age and how our responses to help children needs to be tailored to age. We need to bring this information to the aid of those who are working with children, youth, and families who have suffered losses.

Post Traumatic Stress Syndrome (PTSD). Following previous disasters such as children's witnessing of the explosion of the U.S. Challenger, we know that such events can lead to symptoms in childhood associated with PTSD. Again, we know quite a bit about the importance of age to both the expression of symptoms and their treatment. This information could be very useful to the widespread counseling activities that have arisen to address the needs of those more seriously traumatized by this event than others.

Intergroup Attitudes and Relationships. We know less about the development on intergroup relations. However, as our childhood population has become increasingly diverse, research has come to address this diversity and its consequences for healthy development. We know for example that children who grow up in an environment that promotes tolerance will themselves be tolerate. We also know that poverty and low self esteem and other risks to development can breed hatred and intolerance as scapegoats for the shortcomings on one's own lives. We need to work with teachers, school administrators, church staff, counselors and others to share the information we have, albeit more limited than we might like, to prevent a wave of intolerance as arose in this country following the bombing of Pearl Harbor.

Civic Engagement. Recent years have seen a growth in concern over the lack of civic engagement in this country, particularly in youth. A body of research has arisen to address this concern; Editor Sherrod is one SRCD member doing such research and has shown that youth are not as apathetic as they are portrayed to be. However, this horrible event has unleashed a wave of patriotism and civic commitment unlike any we have seen since the last world war. We need to find out if this wave of civic enthusiasm has affected youth and understand how we may develop tools to keep this spirit following as other than response to a national tragedy.

This is perhaps the most horrible event of our generation. We need to make sure that we bring to bear the information we have to help children, youth and families cope. And we need to use this incredible event to bolster our learning about the responses of children and youth, so that we may be better prepared to offer assistance in the future.

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The Effects of Welfare Reform Policies on Children

Pamela A. Morris
Manpower Demonstration Research Corporation

Introduction

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), passed in 1996, was the culmination of several decades of efforts to promote work and reduce long-term welfare receipt among single-parent families. As a result of these efforts, Aid to Families with Dependent Children (AFDC), which had guaranteed aid for low-income families with children, was eliminated. It was replaced with Temporary Assistance for Needy Families (TANF), which provided block grants to states, introduced time limits on cash assistance, and imposed work requirements on recipients. At the same time, benefits for working-poor families were expanded to reward work outside the welfare system through the Earned Income Credit (EIC, the federal tax credit that supplements the earnings of low-income families), publicly funded health insurance, and child care assistance. In the wake of all of these developments, there has been very little research to inform our understanding of how these changes may have affected children. Yet, because these changes encourage parental employment and weaken the safety net for families in which parents do not maintain employment, they may have important consequences for children.

In this report, a recent analysis that was completed as part of MDRC's Next Generation Project, examining the effects of welfare and employment policies on children's development, is summarized (Morris, Huston, Duncan, Crosby, & Bos, 2001; see text box 1). Notably, this report does not provide an assessment of the effects of the post-1996 changes. Rather, it examines the effect on children of specific welfare reform policy choices that are currently being used by states, and provides critical information about whether promoting work among low-income single parents helps or hurts children, and under what conditions it does so. In so doing, it informs decisions policymakers are currently making as their welfare policy continues to evolve.

Background Research

Nonexperimental developmental research provides information to develop hypotheses about the effects of policies that move parents from welfare to employment, and, sometimes, increase their income in the process. For low-income families headed by single mothers, in particular, the associations between maternal employment and children's cognitive and social development tend to be positive when employment begins after the first 9 to 12 months of life (Han, Waldfogel, & Brooks-Gunn, 2001; Harvey, 1999; Vandell & Ramanan, 1992; Waldfogel, Han, & Brooks-Gunn, in press; Zaslow & Emig, 1997). But these differences between children of employed and nonemployed mothers appear to be due as much to the differences in characteristics between employed and unemployed mothers, rather than parents' work status (Zaslow, McGroder, Cave, & Mariner, 1999). Moreover, holding highly routinized jobs that pay very low wages and afford little autonomy, which are characteristic of many of the jobs that welfare recipients qualify for, appears to have negative effects on mothers' emotional well-being and, in turn, on children's development (Moore & Driscoll, 1997; Parcel & Menaghan, 1994, 1997). Finally, some welfare programs increase employment by *requiring* parents to go to work and research suggests that maternal employment may have more positive effects on children when mothers want to work, than when they feel they should work (Alvarez, 1985; Farel, 1980).

In addition to increasing employment, welfare programs are typically designed to reduce dependence on welfare. However, research is mixed about whether reducing the stigma of receiving welfare will benefit children or not. Many studies found no relation between welfare receipt and children's cognitive and social development once demographic and family characteristics are taken into account; in rare cases, positive relations were found (Butler, 1990; Haveman & Wolfe, 1995; Levine & Zimmerman, 2000; Ratcliffe, 1996; Yoshikawa, 1999; Zill et al., 1995). Other studies revealed that children in families receiving welfare have lower-quality home environments, lower academic achievement, and lower completed schooling than children in other poor families, in which mothers are working or are combining work and welfare (Brooks-Gunn, Klebanov, Smith, & Lee, 2001; Duncan & Yeung, 1995; Hofferth, Smith, McLoyd, & Finkelstein, 2000; Moore, Morrison, Zaslow, & Glei, 1994; Smith, Brooks-Gunn, Klebanov, & Lee, 2000; Smith, Brooks-Gunn, Kohen, & McCarton, 2001). In a study comparing mothers who did and did not exit welfare, children of mothers who left welfare and earned enough money to put them above the poverty threshold had higher cognitive scores than those whose mothers left welfare but

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Box 1

"How Welfare and Work Policies Affect Children: A Synthesis of Research" by Pamela A. Morris, Aletha C. Huston, Greg J. Duncan, Danielle A. Crosby and Johannes M. Bos is a product of the Next Generation project, a collaboration among researchers at the Manpower Demonstration Research Corporation (MDRC) and several leading research institutions that is being funded by the David and Lucile Packard Foundation, William T. Grant Foundation, and John D. and Catherine T. MacArthur Foundation. The report is available at http://www.mdrc.org/NextGeneration.

earned less than the poverty threshold (Smith et al., 2001; see also Gyamfi, Brooks-Gunn, & Jackson, 2001).

Some welfare programs are intended not only to increase employment, but also to reduce poverty among low-income welfare recipients. These policies should have positive effects on children as poverty has been found to have small but consistently negative effects on children's development (Duncan, Brooks-Gunn, & Klebanov, 1994; Duncan & Brooks-Gunn, 1997; Mayer, 1997; McLoyd, 1998). Unsurprisingly, persistent and deep poverty has been shown to be more detrimental to children than transient poverty (Duncan et al., 1994; Bolger, Patterson, Thompson, & Kupersmidt, 1995). Family income may influence children affecting the resources parents can provide to their children and influencing parental stress and parenting behavior (Bradley & Caldwell, 1984; Smith, Brooks-Gunn, & Klebanov, 1997; Sugland et al., 1995; McLoyd, Jayartne, Ceballo, & Borquez, 1994). Family income appears to more consistently predict children's academic and cognitive performance, more so than behavior and health problems (Duncan & Brooks-Gunn, 1997; Klerman, 1991; Korenman & Miller, 1997). And, poverty in early childhood appears more detrimental than poverty in middle childhood or adolescence (Duncan, Yeung, Brooks-Gunn, & Smith, 1998).

Welfare and Employment Policies Examined

In this report, I describe the results of a report synthesizing 5 studies that together examine the effects on elementary school aged children of 11 different welfare and employment programs (see text box 2). Together these programs examine the effects of three policy approaches currently used in many state welfare programs: earnings supplements, mandatory employment services, and time limits on welfare receipt.

Mandatory employment services imply requiring single parents to participate in employment or employment-related activities as a condition of receiving welfare assistance. Since the 1970s, welfare reform approaches have been designed to induce participation in work-related activities or employment by making participation mandatory. The primary tool used to enforce participation mandates is sanctioning, whereby a recipient's welfare grant is reduced if she or he does not comply with program requirements. These activities take two basic forms: 1) job search activities, providing single parent welfare recipients with job search activities in the form of job clubs to help them find work; and 2) educational activities, to increase single parents' basic skills before moving them into jobs.

Today, virtually all states are using such mandates in their attempt to reduce welfare use and increase parents' self-sufficiency. In many cases, the mandates are more stringent (with respect to the number of hours of work required or the size of the sanction) than those in the studies examined here. In the programs examined here, imposing a sanction for noncompliance with the participation mandate entailed reducing the family's monthly welfare grant by the adult portion of the grant and leaving the child portion unchanged. These sanctions — known as partial family sanctions — typically reduced the welfare grant by 15 percent to 20 percent. While over 30 states currently have similar partial sanctions in place as the first penalty that welfare recipients face for nonparticipation, in only about half are such partial sanctions the maximum sanction imposed on families. The other states impose full family sanctions, eliminating all of the family's welfare grant. Therefore, the findings presented here may not be the same as those in programs that are more stringent.

Studies in the 1980's showed that the mandatory em-

Box 2
Studies Used in this Synthesis

This report discusses a recent synthesis of data from five program evaluations, building on their research designs, outcome measures, and impact analyses. The evaluations and the organizations that conducted them are listed below.

Programs with Mandatory Employment Services (without earnings supplements or time limits)

The *National Evaluation of Welfare-to-Work Strategies* is being conducted by MDRC under contract to the U.S. Department of Health and Human Services. The Child Outcomes Study, which examines program impacts on young children, is being conducted by Child Trends under subcontract to MDRC (Freedman et al., 2000; Hamilton, 2000; McGroder, Zaslow, Moore, & LeMenestrel, 2000).

Programs with Earnings Supplements

The *New Hope* program is being evaluated by MDRC under contract to the New Hope Project, Inc., in collaboration with researchers from Northwestern University, the University of Texas at Austin, the University of Michigan, and the University of California at Los Angeles (Bos et al., 1999; Huston et al., 2001).

The *Minnesota Family Investment Program* was evaluated by MDRC under contract to the Minnesota Department of Human Services (Gennetian & Miller, 2000; Knox, Miller, & Gennetian, 2000; Miller et al., 2000).

The *Self-Sufficiency Project* was conceived by Human Resources Development Canada. The project is being managed by the Social Research and Demonstration Corporation (SRDC) and evaluated by SRDC and MDRC (Michalopoulos, Card, Gennetian, Harknett, & Robins, 2000; Morris & Michalopoulos, 2000).

Program with Time Limits

Florida's *Family Transition Program* was evaluated by MDRC under contract to the Florida Department of Children and Families (Bloom et al., 2000).

ployment approach was effective in moving parents from welfare into employment. However, the jobs that welfare recipients found paid very little, leaving parents who moved from welfare into employment no better off financially than they were when they were receiving welfare benefits (Gueron & Pauly, 1991). This motivated a second approach (that is called *earnings supplements)* to increasing the self-sufficiency of welfare recipients, supplementing the earnings of those who moved from welfare into employment. Earnings supplements provide additional income to parents who work, either by not counting all of parents' earnings when calculating their welfare benefits (through what are known as "earnings disregards"), or by providing cash (and, sometimes, in-kind) supplements from a source outside of the welfare system.

The studies examined here include policies that are comparable to the most generous policies currently in effect. For example, the federal Earned Income Credit (EIC) currently provides nearly $4,000 per year to a parent with two children who works full time at a minimum-wage job, a level similar to those in the generous policies examined here. In addition, most states have implemented an "enhanced earnings disregard" as part of their welfare reform strategy. In a few states, the enhanced earnings disregards are as generous as the supplements examined here or more so. A welfare recipient in Connecticut, for instance, can now continue receiving all of her welfare and Food Stamp benefits as long as she earns less than the federal poverty threshold. Relative to how she would have fared under the AFDC system, this disregard provides her

with about $600 more per month in income if she works full time at a minimum-wage job. And California now allows welfare recipients who work to keep the first $225 of their monthly earnings without having their welfare benefits reduced; beyond that point, each additional dollar of earnings reduces their benefits by only half a dollar (rather than reducing benefits by about a dollar for every dollar of earnings as under AFDC). As a result, a working welfare recipient in California can receive as much of an income boost as a program group member who received the maximum benefits in these studies. The situation is similar in other high-grant states that have expanded their earnings disregards. At the same time, many enhanced disregards are not as generous as the supplements provided by the programs analyzed in this chapter. In some states, the disregard is very low, sometimes as low as 20 percent of a recipient's earnings (in Alabama, for example). Also, in states with very low benefit levels (e.g. in West Virginia, where the welfare benefit is only $253 and the earnings disregard is 40 percent) even an enhanced earnings disregard translates into very little increase in family income.

More recently, policymakers have instituted *time limits* on the receipt of welfare, limiting the length of time families can receive cash assistance. Until 1996, cash welfare assistance was a federal entitlement that was available to families as long as they met the eligibility requirements. The federal welfare law of 1996 sets a lifetime limit[1] of five years on cash assistance receipt, but states may shorten or extend the limits by using state funds. States may also exempt 20 percent of the caseload from time limits for hardship reasons. Once a family reaches the time limit, federally funded cash benefits are terminated, but the family normally remains eligible for Food Stamps, Medicaid, low-income child care assistance, and (where available) state-supported cash assistance. More than 40 states have established limits on the receipt of cash assistance that result in the termination of the welfare grant, ranging from 21 to 60 months. A few states do not have time limits, and some others have time limits that result in the reduction, rather than termination, of the welfare grant.

Notably, the policies examined in this report do not reflect the full range of policies currently being implemented by states as part of their TANF programs. Moreover, the policies were all evaluated against the backdrop of the economic climate of the 1990s. The effects of these policies may be attenuated or exacerbated in a very different economic climate.

As is clear from the descriptions above, these three welfare strategies are intended to affect parents' welfare dependency, employment and, in some cases, income, and only indirectly, through these changes in parents' economic outcomes, are expected to affect children. As we discuss the effects on children of each of these policy approaches, we briefly review the findings of a recent synthesis of studies evaluating the effect of these policies on these parental economic outcomes (Bloom & Michalopoulos, in press) in order to provide a backdrop for understanding the effects of these policies on children.

Before turning to the findings, however, it is important to note that each of the eleven programs examined here used a random assignment research design, which is generally viewed as the most rigorous way to test the effects of a particular policy approach. That is, families were assigned at random (through a lottery-like process) to either a program group or a control group. The program group was subject to the rules and benefits of the new program, while the control group was subject to the prior program (usually the AFDC program in operation during or prior to that period). Because the two groups did not differ systematically at the beginning of the study, any differences between them or their children found during the study can be reliably attributed to differences between the groups' experiences in their respective programs, and these differences are referred to as the *impact* of the program.

Effects of Programs with Mandatory Employment Services

By requiring welfare recipients to participate in employment-related activities, programs with mandatory employment services increased employment and reduced parents' reliance on welfare (Bloom & Michalopoulos, in press). Programs that encourage participation in basic educational activities typically had smaller effects initially than those that encourage participation in a job search, but these differences seemed to dissipate after a few years. Because parents are in essence trading their welfare benefits for earnings, however, these programs left family income unchanged. In sum, these programs increased parents' employment, but not their income.

What can we say about the effects of these policies on children? Two years after parents had started the programs, there were few effects on elementary school aged children (children who were preschoolers at the beginning of the study and in elementary school when we interviewed their parents two years later), and the scattered effects

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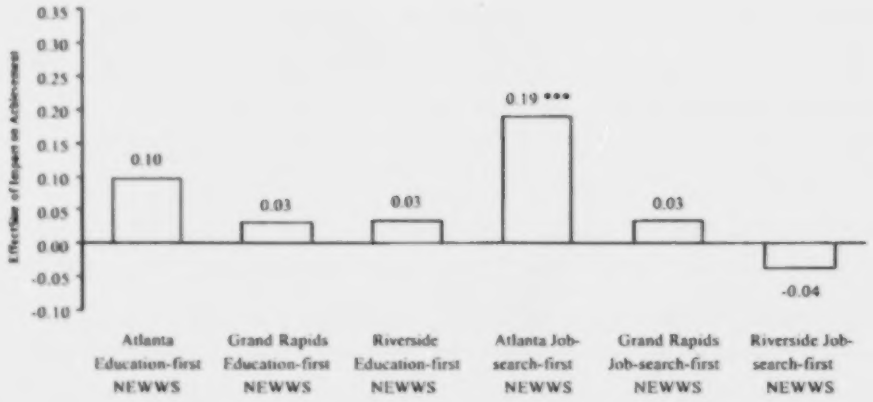
Figure 1
Impacts of Six Programs with Mandatory Employment Services on Children's School Achievement



NOTES: The NEWWS sample includes children of single mothers in the NEWWS evaluation aged 3-5 at the beginning of the study whose parents were randomly selected to participate in the two-year follow-up survey (sample sizes for education-first programs: Atlanta = 1,026, Grand Rapids = 421, Riverside = 578; sample sizes for job-search-first programs: Atlanta = 902, Grand Rapids = 441, Riverside = 694).

Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent (two-tailed test).

In NEWWS, achievement was measured using children's standard scores on the Bracken School Readiness Composite test, which assesses knowledge of colors, letters, numbers/counting, comparisons, and shapes.

that occurred were equally likely to be positive as negative. These findings are not consistent with the views of critics who thought that forcing single mothers to work would negatively affect young children. However, they also indicate that the benefits of moving mothers from welfare to employment that were hypothesized were not realized either.

The findings for the six programs that included mandatory employment services are presented in Figure 1. In figure 1, each bar represents the *effect* on a measure of children's cognitive achievement of one program (i.e., the difference between the program and control group levels), shown in terms of effect sizes[2], which allows for comparison of measures on a common metric. Children were administered the Bracken Basic Concepts Test, a test of their basic academic skills (i.e. their knowledge of numbers, colors and comparisons), and there were few differences between the group subject to the mandatory employment services and those in the control group subject to the prior AFDC system.

Other aspects of children's development were also assessed, with similar results. Parents were asked about children's internalizing and externalizing problem behavior, their positive social behavior and how healthy children were. However, for these other aspects of children's well-being, parents in the mandatory employment services rated their elementary school aged children similarly to parents in the control groups, and the few effects that were found were mixed—sometimes there were positive effects of these programs on child outcomes, and sometimes there were negative effects of these programs on child outcomes. Overall, these results are consistent with research that has shown neutral effects of mother's employment under many circumstances. At the same time, one might have expected that *requiring* employment among mothers who had previously not been working might be more harmful to children than voluntary employment, even when those requirements are combined with services to help families find work. Perhaps the short-term stress of being mandated to move from welfare to work is balanced by the benefits to children when mothers attain the positive status of worker, or perhaps parents increased their employment because

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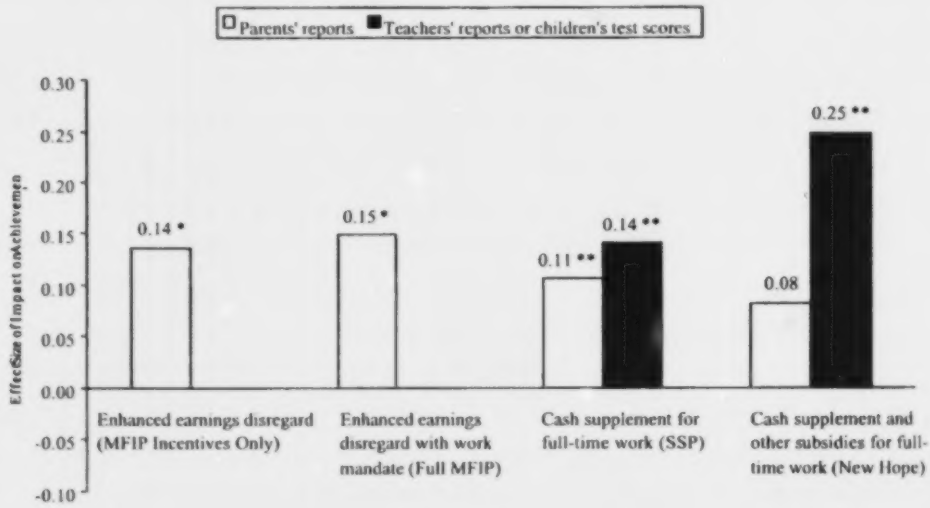
Figure 2
Impacts of Four Earnings Supplement Programs on Children's School Achievement



NOTES: In each study, children were selected for inclusion in the sample on the basis of their age at random assignment or their age at follow-up.

The MFIP sample includes children of parents in the MFIP evaluation aged 5-12 at the time of the three-year follow-up survey (aged approximately 2-9 at the time of random assignment) whose parents were long-term recipients in urban counties and underwent random assignment between April 1, 1994, and October 31, 1994 (sample size for Full MFIP = 587; sample size for MFIP Incentives Only = 573).

The SSP sample includes children of single parents in the SSP evaluation aged 6-11 at the time of the three-year follow-up survey (aged approximately 3-8 at random assignment) who were living in the home at the time of random assignment and at the time of the three-year follow-up survey (sample size = 2,158).

The New Hope sample includes children of the single parents in the New Hope evaluation who were aged 1-10 at random assignment and whose parents participated in the two-year follow-up survey (sample size = 832).

Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent (two-tailed test).

In MFIP, achievement was assessed using a single-item measure that asked parents to rate their child's overall performance in school on a scale ranging from 1 ("not well at all") to 5 ("very well").

In SSP, achievement was measured using a 26- to 34-item math skills test and expressed in terms of the proportion of items answered correctly. Parents' assessments of achievement were measured using their ratings of their child's functioning in three academic subjects on a five-point scale ranging from 1 ("not very well") to 5 ("very well"). The ratings were averaged across the three academic subjects to compute a single score for each child.

In New Hope, teachers' reports of achievement were measured using the 10-item Academic Subscale from the Social Skills Rating System, which asked teachers to rate the child's skills relative to those of other children in areas such as math, reading, and oral communication on a five-point scale ranging from 1 ("bottom 10 percent") to 5 ("top 10 percent"). The responses were averaged across the 10 items to compute a single score for each child. Parents' assessments of achievement were measured using a single-item measure that asked parents to rate their child's school performance, based on past report cards or other sources, on a five-point scale ranging from 1 ("not at all well") to 5 ("very well").

of the services provided rather than because of the participation mandates.

Effects of Programs with Earnings Supplements

The key difference between programs with earnings supplement and those with mandatory employment services is that the former attempted to increase income for families who worked, and did so successfully (Bloom & Michalopoulos, in press). Like programs with mandatory employment services, earnings supplements increased parents' employment. However, because parents could con-

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tinue to receive welfare benefits, or cash supplements outside the welfare system, as they made the transition from welfare into employment, these programs increased income and reduced poverty. Because families continued to receive some form of cash transfer as they worked (either through the welfare system or outside of it) they typically increased families' reliance on these transfers and thus, government costs. However, because more families combine work and benefits, these programs typically reduced parents' sole reliance on welfare.

For children, the results were even more encouraging, and suggest that welfare reforms can be structured in such a way as to benefit children's development. Programs with earnings supplements resulted in consistently positive effects for elementary school-aged children, particularly in their school achievement. As indicated in Figure 2, in four different programs that all included earnings supplements, children who were preschool and early school aged at the beginning of the studies, and in elementary school at follow-up two to three years later, showed improvements in achievement, either based on parental reports, teacher reports, or children's test scores. The effects were small, but noticeable, generally corresponding to effect sizes of .15. A .15 effect size corresponds to a movement from the 25th percentile (the level children in the control groups in these samples typically were functioning) to the 30th percentile on standardized tests.

In terms of other aspects of children's development, the results were less consistent across the 4 programs, but the effects were either neutral or positive. In three of the four programs, there was also evidence of improvements in elementary school aged children's behavior (either reducing children's problem behavior or increasing children's positive behavior). One program also improved children's health status, as reported by their mothers. The consistency in the findings across the four programs gives considerable confidence in the effects of earnings supplement programs on children.

The results of earnings supplement programs are consistent with nonexperimental research that reports positive associations between family income and children's well-being, particularly as reflected in cognitive performance and school achievement (Smith et al., 2001). The fact that welfare to work programs with an antipoverty component can lead to improvements in children's cognitive outcomes — improvements that are detected two to three years after their parents first enter the programs — has important implications for policy and program design. That is, the findings suggest that welfare policies can be designed in a way to benefit children. Furthermore, the consistency in the findings across the sites and studies considered here justifies greater confidence in the generalizability of the programs' effects.

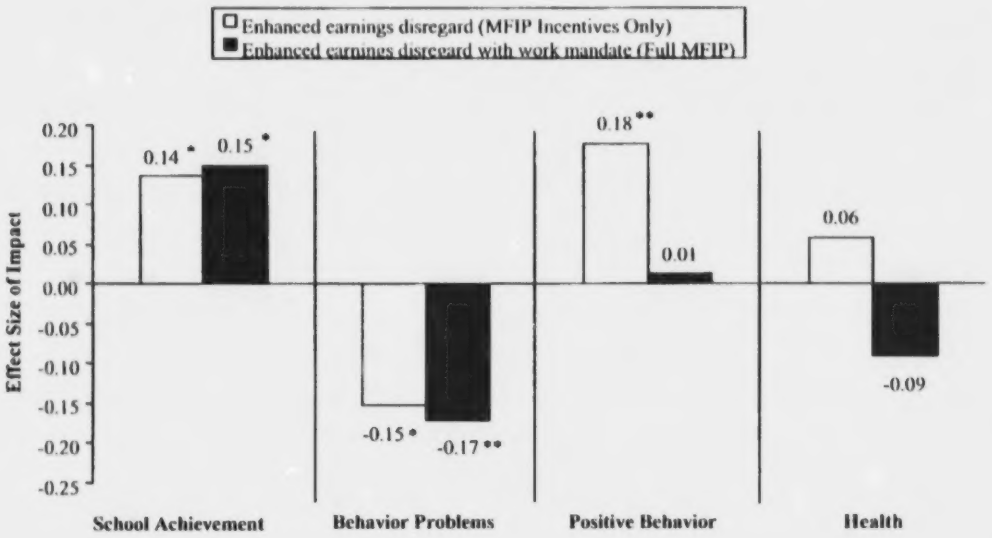
Earnings supplements can increase earnings and income, and benefit children, but at a cost to the government. For example, the net cost of MFIP per family for services, cash assistance, and Medicaid was about $2,000 per year for single-parent long-term recipients, and SSP's net cost per family was about $450 per year — all of it spent on cash assistance because the program did not offer special services. New Hope was the most expensive of the three programs partly because it provided a more comprehensive package of services and partly because it generated smaller welfare savings (some families in the study were not welfare recipients to begin with). The net cost of New Hope per family was about $4,000 per year. Policymakers will need to decide if the benefits to children are worth these additional costs.

Notably, however, these programs do not remove children's initial level of disadvantage. On many measures, these low income children, despite improvements in their well-being, are functioning quite poorly. As indicated earlier, the improvements in children's school achievement correspond to an increase on a standardized test to the 30th percentile—clearly signifying difficulties even after improvement.

These findings imply that welfare policy can be implemented in a way that not only does not harm children, but actually benefits them. These benefits to children are consistent across four different programs that provided the earnings supplements in different ways—but these four programs shared the provision of supports to families as they made the transition from welfare to employment and an increase in parents' employment and income. Considering that welfare policy was originally designed with children in mind, it is interesting that this is the first evidence of a welfare reform strategy that can actually benefit children.

Adding a mandate to an earnings supplement program. One of the studies permits a direct experimental comparison of earnings supplement programs with and without mandatory employment services, because it utilizes a three group research design where parents are randomly assigned to a program group in which they were subject to a participation mandate combined with an earnings supplement, or to a program group in which they were subject to all the same benefits of the earnings supplement, without the mandate, or to a control group. One might suspect

Figure 3
Impacts on Child Outcomes When Adding Mandatory Employment Services to an Earnings Supplement Program



NOTES: The MFIP sample includes children of parents in the MFIP evaluation aged 5-12 at the time of the three-year follow-up survey (aged approximately 2-9 at the time of random assignment) whose parents were long-term recipients in urban counties and underwent random assignment between April 1, 1994, and October 31, 1994 (sample size for Full MFIP = 587; sample size for MFIP Incentives Only = 573).

The statistical significance levels of the impacts are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent (two-tailed test). The statistical significance levels of the differences between impacts are not noted in the figure. The only difference between impacts that was statistically significant was that in positive behavior for MFIP Incentives Only and Full MFIP.

Achievement was assessed using a single-item measure that asked parents to rate their child's overall performance in school on a scale ranging from 1 ("not well at all") to 5 ("very well").

Behavior problems were measured using parents' responses to a 12-item externalizing subscale of the Behavioral Problems Index that assesses aggressive behaviors such as bullying and cheating. Responses range from 0 ("not true") to 2 ("very true"). The responses to the 12 questions were summed to compute a single score for each child.

Positive behavior was measured with the 25-item Positive Behavior Scale, which included three subscales: compliance, social competence, and autonomy. Parents responded to each item on an 11-point scale ranging from 0 ("not at all like my child") to 10 ("completely like my child"). The responses to the 25 questions were summed to compute a single score for each child.

Health was assessed using a single-item measure that asked parents to rate their child's health on a five-point scale ranging from 1 ("poor") to 5 ("very good").

that mandatory employment services increase parental stress, and thereby reduce the positive effects of earnings supplements on children's well-being.

With regard to parents' economic outcomes, the program that included the mandate as well as the earnings supplement increased full time employment (over 30 hours per week), while the program that included only the earnings supplement increased only part time employment. The impacts of these two programs on children are presented in Figure 3. Adding the participation mandate had no effect on parents' ratings of children's achievement in school, behavior problems, or health. The only outcome that was affected by the addition of the mandate was parents' ratings of children's positive behavior: While there is a positive effect on this measure in the program that only included the earnings supplement, there is no effect in the program that added the mandate. Notably, the program including the mandate did not produce any negative

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Box 3

Unpacking the Effects of Earnings Supplement Programs Through Employment and Income: Findings from Morris & Gennetian, 2001

Data from two of the earnings supplement programs evaluated as part of the Minnesota Family Investment Program (MFIP) were used as part of analysis to examine the extent to which the improvements in child outcomes were due to the increases in income or the increases in employment due to the program (Morris & Gennetian, 2001). The findings presented in that paper indicate that the increases in income due to MFIP, rather than the increases in employment, are responsible for the benefits to children's well-being observed.

In MFIP, single-parent families receiving welfare were assigned to one of three research groups: (1) MFIP, (2) Incentives Only, or (3) AFDC. Whereas under AFDC welfare payments were reduced dollar for dollar with earnings, families assigned to both the MFIP and Incentives Only groups were able to keep more of their welfare income as their earnings increased. In addition, families in the MFIP group were required to participate in employment and training services if they were on welfare for 24 of 36 months (or else they faced sanctions), while those in the Incentives Only group did not face any of these employment and training mandates. Families assigned to the AFDC group received the benefits of Minnesota's AFDC program. The analysis in this paper capitalized on the three-group research design to evaluate the mediating effects of income and employment on child outcomes using an instrumental variables estimation strategy (in effect, using the two program dummies as instruments for post-random assignment income and employment). Such a technique has the advantage of allowing for causal inference.

Evaluation results conducted at 18 and 36 months after random assignment show that MFIP increased both employment and total family income (Miller et al., 1997; Miller et al., 2000). Over the three-year follow-up period, MFIP increased employment 13 percentage points and reduced poverty by 10 percentage points among single parent, urban, long-term welfare recipients (recipients who had been receiving welfare for at least 2 years when they entered the study).

Morris and Gennetian (2001) find significant positive effects of this increase in income due to MFIP on children's engagement in school and positive social behavior. The effects on children's school achievement and behavior problems are in the expected direction (favorable effects of income) but are not statistically significant. In none of the models did employment have a significant effect (and in all cases, the direction of the effect was negative—unfavorable effects of employment).

While this is only a single study of the mediating effects of income and employment in the context of these earnings supplement programs, the findings imply that the increases in income are indeed responsible for the benefits to children's well-being that we observed in these programs.

effects on children, but rather only reduced the positive effect to nonsignificance. One might have expected that adding a participation mandate may have reduced some of the positive effects of earnings supplements, and perhaps even have generated harm to children, but that was generally not the case.

Effects for long term welfare recipients. In addition, analyses were conducted to examine the effects on a particularly vulnerable group of welfare recipients, those who had been on welfare for at least two years when they began the study. The thinking was that these parents would have the most difficult time in making the transition from welfare to employment. The findings suggested that programs with earnings supplements were particularly pronounced for this group of families. For these families, effects on income and employment were strong, as were the positive effects on children.

Effects on potential mediators: income and employment, child care, parenting and parents' emotional well-being. There are a number of possible explanations for the effects of the earnings supplement programs discussed above. First, we know that the earnings supplement programs increased both maternal employment and income. The positive effects on children could have been caused by increases in family income alone or by increases in employment and income together. Work is currently be-

ing conducted as part of the Next Generation Project to consider this question (see text box 3 for a discussion of some of this work). This work suggests that in one of the studies, it is the increase in income, rather than employment, that is causing the improvements in children's well-being that are observed. This is not to say that current policy should be focused on increasing income rather than employment, since the increase in income from these programs is tied to work and thus it is unclear whether increasing income through other means (e.g., marriage, welfare grant levels) would have the same positive effects on children. However, these analyses do provide us with some understanding of the way in which the effects of these programs occurred.

Secondly, through what mechanisms might the increases in parental employment and income caused by the programs benefit children? One possibility is that increased employment and financial stability improved parents' emotional well-being or reduce their feelings of stress, and, in turn, parents' interactions with their children (McLoyd, 1990; McLoyd, et al., 1994). Moreover, by increasing the use of child care (because of higher employment) and changing the type of child care that parents use (because of wider child care options made possible by higher income), earnings supplement programs introduce children to environments and educational opportunities to which they otherwise might not have been exposed, in effect changing the resources available to children (Becker, 1981; Coleman, 1988).

In three of the four earnings supplement programs, mothers in the program groups were more likely to enroll their children in formal child-care programs or after-school programs and extracurricular activities than were mothers in the control group. Thus, evidence from three of the programs suggests that structured programs outside of the home may be one of the pathways by which the beneficial effects to children occurred. At the same time, surprisingly, measures of parenting behavior were not much affected by these programs. Across all four programs, there were few differences in parenting behavior (including parental warmth, control and cognitive stimulation) between mothers in the program groups and those in the control groups. Also, there were few effects on mothers' mental health, as there were only scattered and inconsistent impacts on depression and stress across these programs. Of course, it is critical to note that these findings are based on parental report measures, and observational measures may yield different results.

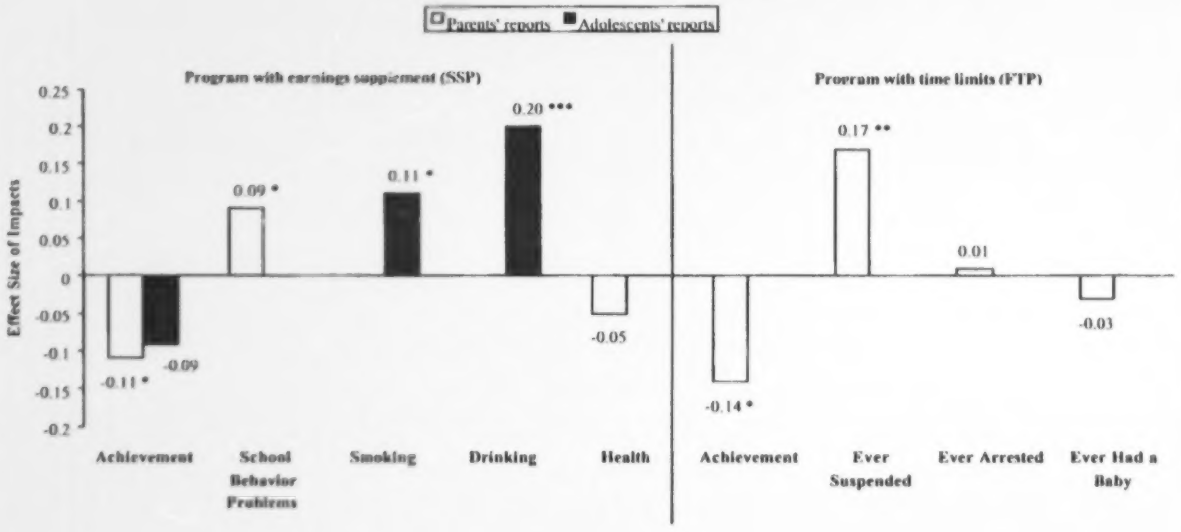
This pattern of some effects on structured child care, with few effects on parenting or mental health suggests that parents' roles in putting their children in formal child care and activities may be one of the primary ways programs with earnings supplements affected child well-being. However, the three group design described earlier for one of the studies puts this conclusion into question: because of the three group design, we can ascertain the policy dimension that drove the effects on child well-being and child care—and the findings from this study indicate that the benefits to children are a result of the earnings supplements, but the increases in formal child care are a result of mandatory employment services (probably because these services increased employment more so than the supplements alone). If the improvements in child well-being were a result of the increases in child care, we would have expected both to be caused by the same policy approach. Of course, other benefits to families that were observed may be a cause of the benefits to children in this program, while the increases in after-school activities and formal care arrangements may explain the benefits in some of the other earnings supplement programs. Further research currently being conducted in the Next Generation Project may help us to understand the pathways to improvements to child well-being in these programs.

All these findings illustrate how difficult it is to attribute conclusively the programs' effects on children to one mechanism. None of the outcomes considered to be possible mediators of effects on children was affected across all programs, at least according to the measures examined. All four programs have in common one program feature (a generous earnings supplement) and one result (an increase in employment and income), but the way in which these factors may have affected children remains unclear.

Effects of the Single Time Limited Welfare Program

There is very limited information available at this time on the effects of time limited welfare programs. Two programs that have been evaluated in Florida and Connecticut suggest that such time limited welfare policies, which in both cases combined time limits with requirements and benefits, increased employment and reduced welfare, but not more so than the other policies previously discussed (Bloom & Michalopoulos, in press). Moreover, even when such time limited programs are combined with strategies to supplement the earnings of parents who work, any income gains seem to disappear after families begin reaching the time limit. Therefore, these programs seem to in-

Figure 4
Impacts on Adolescent Outcomes for Two Programs



NOTES: The SSP sample includes children of single parents in the SSP evaluation aged 12-18 at the time of the three-year follow-up survey (aged approximately 9-15 at random assignment) who were living in the home at the time of random assignment and at the time of the three-year follow-up survey (sample size = 1,417).

The FTP sample includes children of single parents in the FTP evaluation aged 13-17 at the time of the four-year follow-up survey (aged approximately 9-13 at random assignment) whose parents underwent random assignment between August 1994 and February 1995 and participated in the four-year follow-up survey (sample size = 741).

Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent (two-tailed test).

In SSP, achievement was measured using parents' and children's responses to questions about the child's functioning in three academic subjects. The responses, which were expressed on a five-point scale ranging from 1 ("not very well") to 5 ("very well"), were averaged across the three subjects to compute a single score for each child.

In SSP, school behavior problems were assessed using parents' responses to a single-item measure that asked how often in the past school year they were contacted by the school about their child's behavior problems in school. Responses range from 1 ("never contacted or contacted once") to 3 ("contacted four times or more").

In SSP, smoking was assessed using children's responses to a single-item measure that asked whether or not they currently smoked.

In SSP, drinking was assessed using children's responses to a single-item measure about their frequency of alcohol use in the prior six months. Responses range from "never" to "every day." If the child reported using alcohol at least weekly, the response was coded as 1; otherwise it was coded as 0.

In SSP, health was measured using parents' responses to four items about their child's health on a scale ranging from 1 ("false") to 5 ("true"). The responses were averaged across the four items to compute a single score for each child.

In FTP, achievement was assessed using a single-item measure that asked parents to rate their child's overall performance in school. Responses range from 1 ("not well at all") to 5 ("very well").

In FTP, school suspension was assessed using a single-item measure that asked parents if their child had ever been suspended from school since random assignment.

In FTP, police involvement was assessed using a single-item measure that asked parents if their child had been arrested since random assignment for any offense other than a minor traffic violation.

In FTP, fertility was assessed using a single-item measure that asked parents if their child had fathered a baby or had a baby since random assignment.

crease employment and reduce welfare dependence, but increase income only modestly, or only for a limited period of time.

Only one of these two studies has reported on the effects of time limited welfare on children to date—Florida's Family Transition Program (FTP; Bloom et al., 2000). That program combined time limits with small supplements and mandates. That study found few effects on el-

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ementary school aged children—allaying fears about the effects of time limited welfare on children. Moreover, no negative effects occurred for children in a subgroup of families who were most likely to hit the time limit, and may have even experienced income loss from it (Bloom et al., 2000). While this speaks well for the effects on children of welfare reform programs that include time limits, further research is clearly needed on time limited welfare programs before any conclusions about the effects of this policy approach can be made. Florida approached its time limit cautiously, providing an array of services and supports to families. It is not clear whether all time limited welfare programs would have similar neutral effects on children. Moreover, because children were assessed shortly after families began reaching the time limit, it is not clear what the long-term effects of time limits may be.

Effects on Adolescents

For adolescents, the findings were less encouraging than they were for elementary school aged children. Adolescents were only examined in two studies—in one program with earnings supplements and one program with time limits (see Figure 4). In both programs, however, there was some evidence of negative effects. Adolescents were more likely to have school behavior problems and be drinking and smoking in one program (although response rates in this study were relatively low), and were doing worse in school and more likely to be suspended in the other (although there were no differences in adolescents' fertility or police involvement). Adolescents may be responding to the decrease in supervision and the increase in their household roles and responsibilities as parents make the transition into employment. Because adolescents were only examined in two programs, however, further research on this age group of children is needed before stronger conclusions can be made about the effects of welfare programs on adolescents.

Implications for Policy

The findings discussed point to a couple of key lessons for welfare policy:

First, they suggest that welfare policies that increase employment, but do not affect income, will have few effects on children. These findings are consistent with the generally neutral effects of maternal employment for low income children found in the developmental literature, and should be reassuring to those concerned about the negative effects to children of requiring mothers to go to work. Of course, the policies that were examined here do not represent the full range of TANF programs currently in effect. As indicated earlier, in the programs examined here, sanctions for noncompliance entailed reducing the family's monthly welfare grant by the adult portion of the grant and leaving the child portion unchanged, rather than eliminating all of the family's welfare grant. The latter policy, which is implemented in most states, would likely result in a more pronounced income loss for families, and may have different effects on children.

Second, these findings affirm that welfare reform can actually benefit children, and thus achieve a goal that welfare policy was originally designed to do—to protect the well-being of low income children. Welfare reforms that support work, and thus succeed in increasing income as well as employment, had positive effects on elementary school children. The effects were particularly pronounced for children at greatest risk (those of long-term welfare recipients) and it benefited them in an area of great concern to many—in children's school achievement.

Are state welfare reform policies currently in effect likely having the positive effects observed here? Many states have instituted enhanced earnings disregards as part of their TANF programs, in effect, allowing welfare recipients to keep more of their welfare payments as they go to work. However, these earnings disregards are typically smaller than those examined here, as indicated earlier. Moreover, even in states with generous packages, these supplements are typically not emphasized, so that many welfare recipients who get jobs fail to take advantage of the supplements available to them. In addition, in most states, time limits are combined with these earnings disregards. One might expect that an earnings disregard would have very different effects when combined with time limits. Because their goals differ, time limits and earnings supplements may work at cross-purposes. Time limits encourage people to leave welfare quickly and save their remaining months of welfare eligibility for a period of crisis. Earnings disregards, in contrast, encourage families to continue to receive welfare benefits while they are working. Because the supplement comes from the welfare system, families are therefore likely to use up more months of their welfare eligibility if they are eligible to receive a supplement than if a supplement were not available to them. Owing to the tension between time limits and earnings supplements, the effects on family income of a program that combines these two program features,

although hard to predict, are likely to be smaller than those of programs that provide earnings supplements without imposing time limits.

Third, the findings point to the importance of children's developmental stage in evaluating the effects of welfare policies. The emerging negative findings on adolescents do give pause. Interestingly, adolescents have been largely ignored in discussions about the effects of welfare policies.

These findings present policymakers with a choice: policymakers can institute policies that reduce welfare caseloads and increase employment, and save government budgets, but have limited effects on children, or they can increase employment and income, and, in turn, benefit children. Supports for working families do cost more to the government, but—for states that are interested in using welfare policy to improve children's school achievement—might be an important complement to programs aimed directly at improving the school outcomes of children.

The reauthorization of PRWORA in 2002 raises difficult issues. A key question will be whether to maintain the same amount of money in the block grants that states received in 1996, given the sharp decline in welfare caseloads. For states with an interest in supporting working families, the research here suggests one benefit of maintaining the same level of support in the block grants. That money can be used to supplement the earnings of low income workers, which is likely to increase employment among welfare recipients, as well as achieve an educational goal—giving children a better start in school.

Notes

[1] Lifetime limits restrict the number of months in the recipient's lifetime that she or he can receive welfare benefits. Fixed-period time limits, in contrast, restrict the number of months of benefits over a shorter, specified period — for example, to 24 months in any 60-month period. The time-limited program examined here includes a fixed-period limit rather than a lifetime limit.

[2] The effect size is calculated as the impact (the difference between the average level in the program and control groups) divided by the control group standard deviation.

References

Alvarez, W. (1985). The meaning of maternal employment for mothers and the perceptions of their three-year-old children. *Child Development, 56*(2), 350–360.

Becker, G. (1981). *A treatise on the family*. Cambridge, MA: Harvard University Press.

Bloom, D., Kemple, J., Morris, P., Scrivener, S., Verma, N., & Hendra, R. (2000). *The Family Transition Program: Final report on Florida's initial time-limited welfare program*. New York: Manpower Demonstration Research Corporation.

Bloom, D., & Michalopoulos, C. (in press). *How welfare and work policies affect employment and income: A synthesis of research*. New York: Manpower Demonstration Research Corporation.

Bolger, K. E., Patterson, C. J., Thompson, W. W., & Kupersmidt, J. B. (1995). Psychosocial adjustment among children experiencing persistent and intermittent family economic hardship. *Child Development, 66*(4), 1107–1129.

Bos, J., Huston, A., Granger, R., Duncan, G., Brock, T., & McLoyd, V. (1999). *New hope for people with low incomes*. New York: Manpower Demonstration Research Corporation.

Bradley, R. H., & Caldwell, B. M. (1984). 174 children: A study of the relation between the home environment and early cognitive development in the first 5 years. In A. Gottfried (Ed.), *The home environment and early cognitive development* (pp. 5–56). Orlando, FL: Academic Press.

Brooks-Gunn, J., Klebanov, P., Smith, J. R., & Lee, K. (2001). Effects of combining public assistance and employment on mothers and their young children. *Women and Health, 32*(3), 179-210.

Butler, A. (1990). The effects of welfare guarantees on children's educational attainment. *Social Science Research, 19*, 175–203.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95-S120.

Duncan, G. J., & Brooks-Gunn, J. (1997). *Consequences of growing up poor*. New York: Russell Sage Foundation.

Duncan, G. J., Brooks-Gunn, J., & Klebanov, P. K. (1994). Economic deprivation and early childhood development. *Child Development, 65*(2), 296–318.

Duncan, G. J., & Yeung, W. (1995). Extent and consequences of welfare dependence among America's chil-

dren. *Children and Youth Services Review, 17*(1/2), 1–26.

Duncan, G. J., Yeung, W. J., Brooks-Gunn, J., & Smith, J. R. (1998). How much does childhood poverty affect the life chances of children? *American Sociological Review, 63*, 406-423.

Farel, A. M. (1980). Effects of preferred maternal roles, maternal employment, and sociodemographic status on school adjustment and competence. *Child Development, 51*(4), 1179–1196.

Freedman, S., Friedlander, D., Hamilton, G., Rock, J., Mitchell, M., Nudelman, J., Schweder, A., & Storto. L. (2000). *Evaluating alternative welfare-to-work approaches: Two-year impacts for eleven programs. National Evaluation of Welfare-to-Work Strategies*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.

Gennetian, L., & Miller, C. (2000). *Reforming welfare and rewarding work: Final report of the Minnesota Family Investment Program: Vol. 2. Effects on Children*. New York: Manpower Demonstration Research Corporation.

Gueron, J. M., & Pauly, E. (1991). *From welfare to work*. New York: Russell Sage Foundation.

Gyamfi, P., Brooks-Gunn, J., & Jackson, A. (2001). Associations between employment and financial and parental stress in low-income single black mothers. *Women and Health, 32*(1/2), 119-135.

Hamilton, G. (2000). *Do mandatory welfare-to-work programs affect the well-being of children? A synthesis of child research conducted as part of the national evaluation of welfare-to-work strategies*. Washington, DC: U.S Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.

Han, W., Waldfogel, J., & Brooks-Gunn, J. (2001). The effects of early maternal employment on later cognitive and behavioral outcomes. *Journal of Marriage and the Family, 63*(2), 336-354.

Harvey, E. (1999). Short-term and long-term effects of early parental employment on children of the National Longitudinal Survey of Youth. *Journal of Economic Literature, 33*(4), 1829-1878.

Haveman, R., & Wolfe, B. (1995). The determinants of children's attainments. *Journal of Economic Literature, 33*(4), 1829–1878.

Hofferth, S. L., Smith, J., McLoyd, V. C., & Finkelstein, J. (2000). *Achievement and behavior among children of welfare recipients, welfare leavers, and low income single mothers*. Ann Arbor: University of Michigan, Institute for Social Research.

Huston, A., Duncan, G., Granger, R., Bos, H., McLoyd, V., Mistry, R., Crosby, D., Gibson, C., Magnusson, K., Romich, J., & Ventura, A. (2001). Work-based anti-poverty programs for parents can enhance the school performance and social behavior of children. *Child Development, 72*(1), 318-337.

Klerman, L. (1991). The health of poor children: Problems and programs. In A. Huston (Ed.), *Children and poverty*. New York: Cambridge University Press.

Knox, V., Miller, C., & Gennetian, L. (2000). *Reforming welfare and rewarding work: A summary of the final report on the Minnesota Family Investment Program*. New York: Manpower Demonstration Research Corporation.

Korenman, S., & Miller, J. E. (1997). Effects of long-term poverty on physical health of children in the National Longitudinal Survey of Youth. In G. J. Duncan & J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 70–99). New York: Russell Sage Foundation.

Levine, P. B., & Zimmerman, D. J. (2000). Children's welfare exposure and subsequent development (JCPR Working Paper 130). Evanston, IL, and Chicago: Northwestern University and University of Chicago, Joint Center for Poverty Research.

Mayer, S.E. (1997). *What money can't buy: Family income and children's life chances*. Cambridge, MA: Harvard University Press.

McGroder, S. M., Zaslow, M. J., Moore, K. A., & LeMenestrel, S. M.. (2000). *Impacts on young children and their families two years after enrollment: Findings from the Child Outcomes Study. National Evaluation of Welfare-to-Work Strategies*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation and Administration for Children and Families; U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.

McLoyd, V. (1990). The impact of economic hardship on

black families and children: Psychological distress, parenting and socioemotional development. *Child Development, 61*(2), 311-346.

McLoyd, V. (1998). Children in poverty, development, public policy, and practice. In I. E. Siegel & K. A. Renninger (Eds.), *Handbook of child psychology* (4th ed.), New York: Wiley.

McLoyd, V. C., Jayartne, T. E., Ceballo, R., & Borquez, J. (1994). Unemployment and work interruption among African-American single mothers, effects on parenting and adolescent socioemotional functioning. *Child Development, 65*(2), 562–589.

Michalopoulos, C., Card, D., Gennetian, L., Harknett, K. & Robins, P. K. (2000). *The Self-sufficiency Project at 36 months: Effects of a financial work incentive on employment and income.* Ottawa: Social Research and Demonstration Corporation.

Miller, C., Knox, V., Gennetian, L., Dodoo, M., Hunter, J., & Redcross, C. (2000). *Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program: Vol. 1. Effects on adults.* New York: Manpower Demonstration Research Corporation.

Moore, K., & Driscoll, A. (1997). Low-wage maternal employment and outcomes for children: A study. *Future of Children, 7*(1), 122–127.

Moore, K. A., Morrison, D. R., Zaslow, M. J., & Glei, D. A. (1994). *Ebbing and flowing, learning and growing: Family economic resources and children's development.* Paper presented at a workshop on Welfare and Child Development, National Academy of Sciences, Washington, DC.

Morris, P. & Gennetian, L. (2001). *Identifying the effects of poverty on children: Integrating an instrumental variables estimation method with an experimental design.* Unpublished manuscript.

Morris, P., & Michalopoulos, C. (2000). *The Self-sufficiency Project at 36 months: Effects on children of a program that increased parental employment and income.* Ottawa: Social Research and Demonstration Corporation.

Morris, P. A., Huston, A. C., Duncan, G. J., Crosby, D.A., & Bos, J. M. (2001). *How welfare and work policies affect children: A synthesis of research.* New York: Manpower Demonstration Research Corporation.

Parcel, T. L., & Menaghan, E. G. (1994). *Parents' jobs and children's lives.* New York: Aldine de Gruyter.

Parcel, T. L., & Menaghan, E. G. (1997). Effects of low-wage employment on family well-being. *Future of Children, 7*(1), 116–121.

Ratcliffe, C. (1996). *Intergenerational transmission of welfare participation: How large is the causal link?* Mimeo. Ithaca, NY: Cornell University, Department of Economics.

Smith, J. R., Brooks-Gunn, J. & Klebanov, P. K. (1997). Consequences of living in poverty for young children's cognitive and verbal ability and early school achievement. In G. J. Duncan & J. Brooks-Gunn (Eds.), *Consequences of growing up poor.* New York: Russell Sage Foundation.

Smith, J. R., Brooks-Gunn, J., Klebanov, P. K., & Lee, K. (2000). Welfare and work: Complementary strategies for low-income women? *Journal of Marriage and the Family, 62,* 808-821.

Smith, J. R., Brooks-Gunn, J., Kohen, D., & McCarton, C. (2001). Transitions on and off AFDC: Implications for parenting and children's cognitive development. *Child Development, 72*(5), 1512-1533.

Sugland, B. W., Zaslow, M., Smith, J. R., Brooks-Gunn, J., Moore, K. A., Blumenthal, C., Griffin, T., & Bradley, R. (1995). The early childhood HOME Inventory and HOME Short Form in differing sociocultural groups: Are there differences in underlying structure, internal consistency of subscales, and patterns of prediction? *Journal of Family Issues, 16*(5), 632–663.

Vandell, D. L., & Ramanan, J. (1992) Effects of early and recent maternal employment on children from low-income families. *Child Development, 63*(4), 938-949.

Waldfogel, J., Han, W., & Brooks-Gunn, J. (in press). The effects of early maternal employment on child development. *Demography.*

Yoshikawa, H. (1999). Welfare dynamics, support services, mothers' earnings, and child cognitive development: Implications for contemporary welfare reform. *Child Development, 70*(3), 779–801.

Zaslow, M. J., & Emig, C. A. (1997). When low-income mothers go to work: Implications for children. *Future of Children, 7*(1), 110-115.

Zaslow, M. J., McGroder, S., Cave, G., & Mariner, C. (1999). Maternal employment and measures of children's health and development among families with some history of welfare receipt. *Research in the Sociology of Work, 7,* 233–259.

Zill, N., Moore, K. A., Wolpow, E., Smith, J., Stief, T., & Coiro, M. J. (1995). The life circumstances and development of children in welfare families: A profile based on national survey data. In P. L. Chase-Lansdale & J. Brooks-Gunn (Eds.), *Escape from poverty* (pp. 38-59). New York: Cambridge University Press.

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Social Policy Report (ISSN 1075-7031) is published four times a year by the Society for Research in Child Development. Its purpose is twofold: (1) to provide policymakers with objective reviews of research findings on topics of current national interest, and (2) to inform the SRCD membership about current policy issues relating to children and about the state of relevant research.

Content

The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for policies affecting children. The Society recognizes that few policy issues are noncontroversial, that authors may well have a "point of view," but the *Report* is not intended to be a vehicle for authors to advocate particular positions on issues. Presentations should be balanced, accurate, and inclusive. The publication nonetheless includes the disclaimer that the views expressed do not necessarily reflect those of the Society or the editors.

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Three or four reviews are obtained from academic or policy specialists with relevant expertise and different perspectives. Authors then make revisions based on these reviews and the editors' queries, working closely with the editors to arrive at the final form for publication.

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Social Policy Report

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Social Policy Report

Giving Child and Youth Development Knowledge Away

Volume XVI, Number 2 2002

At What Age Should Children Enter Kindergarten? A Question for Policy Makers and Parents

Deborah Stipek

Summary

Research that bears on the issue of school entry policies is summarized in this report. The focus is on the age children should be to enter kindergarten and the potential benefits of delaying school entry for all or some children. The research reviewed uses three methodologies:

(1) comparing outcomes for children who have delayed entry by a year with children who entered school when they were eligible;

(2) comparing children in the same grade who have different birth dates; and

(3) comparing children who are the same age but in different grades, as well as children who are a year apart in age but in the same grade.

Findings suggest that studies using the first method are inconclusive because accommodations are not made for the selection factors associated with the decision to hold a child out of school. Findings from the other two methods suggest that relatively older children have a modest academic advantage over younger children in the first few grades of school, but that advantage typically disappears. There was no evidence suggesting that younger children gained less than older children from early school experience, and some evidence suggested that school experience produced greater gains on most cognitive dimensions. Generally, the findings reviewed provide more support for early educational experience to promote academic competencies than for waiting for children to be older when they enter school. The author suggests that the focus should be more on making schools ready for children than on making children ready for school.

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From the Editor

One purpose of *SPR* is to promote developmental approaches to policy issues. Too frequently policies ignore the developmental needs of the child. This has been especially true for the growth of mass public schooling in this country. The development of our educational system for children has been based on the agrarian calendar (which, e.g., is why we have a nine month schedule), on increases in the size of the population, and on labor needs, not on the developmental nature and needs of children. The Carnegie Corporation report *Turning Points* published in 1989, for example, documents how middle schools, which arose mainly due to growth in absolute school size, conflict with the developmental nature of the child. The child has to change school at a time when he/she is experiencing the biological, social, and emotional changes of puberty. The cumulative number of changes associated with a school transition at the same time can overwhelm the child. This is a singular example of the type of problem that can arise when the development of the child is not considered when we implement policies or change institutions involving children and youth.

The current issue of *SPR* addresses children's age of entry into school. Increasing numbers of children are entering school at younger ages. Many parents become concerned that their child is disadvantaged if he/she does not enter school as early as possible. The current article, however, finds that age of school entry does not much matter for children's later development. This finding must be partially qualified by the difficulties of such research. Because children are not randomly assigned to age of entry, experiments cannot be done, so causal arguments are challenging. Samples in some studies are small. Nonetheless, this article brings empirical research and careful scholarly thought to an issue much on the minds of parents, philanthropy, and educators. It shows how the developmental needs of young child should be the main factor driving changes in the early education of children.

Lonnie Sherrod, Ph.D., Editor
Fordham University

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At What Age Should Children Enter Kindergarten? A Question for Policy Makers and Parents

Deborah Stipek
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At what age should children begin school? Just a few decades ago the question was relevant to debates about compulsory education laws. But over time, compulsory education laws for school entry have become more symbolic than coercive. Today, even though school is not usually compulsory until the age of six (20 states) or seven (22 states), most children enter school when they are five years old.

Now the common question for policy makers concerns the specific age at which children should be *allowed* to enter kindergarten. Since compulsory education laws do not apply until at least a year after the age of eligibility, the dilemma for parents is whether to send their children to kindergarten as soon as they are eligible. The focus for both policy makers and parents is on determining when children are ready for school. Not discussed in this report, although perhaps a better question, is how do we make schools ready for children.

Current School Entry Policies & Practices

State Policies

The cutoff birth date for kindergarten entry is typically set by the state, although a few states give school districts discretion. Currently, the modal cutoff date is the beginning of September, about the time school begins (see Table 1).

The trend, however, has been to move the cutoff date up, so that children enter kindergarten older on average. Between 1975 and 2000, 22 states moved the birth date required for school entry to an earlier point in the year. Nine of those changes were made since 1990. One state (Indiana) changed its law from allowing districts to set their own age cutoff to a state requirement of June 1. Only one state (Idaho) changed in the opposite direction (from August 16 to September 1).

The reasons articulated in a 1999 California bill (AB 25: Article 1.5, 48005.10) for moving the birth date cutoff to earlier in the school year illustrate the rationale that is typically found in legislative summaries:

(A) By changing the age at which children generally enter kindergarten, California's children will be better prepared to enter into the academic environment that is required by the kindergarten curriculum.

(C) Comparisons between California pupils and pupils in other states on national achievement tests in the later grades are likely to be more equitable if the entry age of California pupils is more closely aligned to that of most other states.

Parental Practice

An increasingly common practice, which also raises the average age of kindergartners, is for parents to voluntarily delay their child's entry a year beyond the time he or she is eligible to begin school (sometimes referred to as academic "redshirting"). Brent, May, and Kundert's (1996) analysis of data for one school district over a 12-year period found steady increases in the use of delayed school entry from about 6% in the first block of three years to about 12% in the most recent block of three years. Recent surveys suggest that about 9 or 10 percent of parents nationally delay their children's entry into kindergarten (Brent et al., 1996; Cosden, Zimmer & Tuss, 1993; May, Kundert, & Brent, 1995; National Center for Education Statistics [NCES], 1997; Byrd, Weitzman & Auinger, 1997). Boys are more likely than girls to be held out, by a factor of nearly 2 to 1 (Brent et al., 1996; Cosden et al., 1993; May et al., 1995). And the closer children's birthdays are to the cutoff date (and thus the younger they would have been if they had entered when the law allowed), the more likely they are to be held out (Cosden et al., 1993; Graue & DiPerna, 2000; May et al., 1995; Mayer & Knutson, 1999; NCES, 1997).

The evidence on race and socio-economic status (SES) differences in delaying school entry is mixed. Studies have reported that Caucasians were more likely to be held out than African-Americans (NCES, 1997) and Latinos (Cosden et al., 1993). Some studies report that middle-class parents

Table 1 Date by Which Child Must Turn Five Years to Enter Kindergarten

Date	Number of States
June 1	1
July 1	1
August 1	1
August 15	1
August 31/September 1	22
September 10-15	4
September 30/October 1	6
December 1-2	3
December 31/January 1	6
LEA Option	5

Source: Education Commission of the States, March 2000; Denver, CO (www.ecs.org).

are more likely to hold their children out than low-income parents (see Meisels, 1992). Other studies that have assessed SES effects report no differences (Graue & DiPerna, 2000; NCES, 1997; Morrison, Griffith, & Alberts, 1997)

Likely Directions in Policies and Practices

The current emphasis on school accountability based primarily on students' performance on achievement tests is likely to encourage more states and districts to consider increasing the age of school entry. The reasoning, seen in the excerpt from the California bill mentioned above, is that if older children benefit more from instruction than younger children, achievement gains could be realized by requiring children to be older when they entered kindergarten. This is a politically attractive strategy for raising test scores because it is simple and economical.

Another current policy trend, eliminating social promotion, puts additional pressure on educators to ensure students' academic success, especially in the early elementary grades, when retention rates are the highest. If older children are better able to master the curriculum, fewer would need to be retained.

School-level practices are also likely to be affected by current accountability pressures and the elimination of social promotion, especially in states in which school resources are based on students' achievement test scores. Studies of kindergarten teachers show that the majority endorse later school entry for children who appear not to be ready for kindergarten (NCES, 1997). The pressure to increase test scores may encourage teachers to advise more parents to hold out relatively young children, especially boys, who they consider to be at risk of poor achievement. Parents' concerns about the increased likelihood of their child being retained may also result in an increased number of children being held out for a year. In brief, the current educational policy climate suggests that the trend toward raising the school entry age is likely to continue both formally, in state legislation or school district policies, and informally, in parent decisions.

The current emphasis on school accountability based primarily on students' performance on achievement tests is likely to encourage more states and districts to consider increasing the age of school entry.

The Substance of the Debate

The argument for moving the birth date cutoff earlier, so that children enter kindergarten at an older age, is based on the assumption that with age come competencies that will improve children's chances for success in school. Although intellectual competencies are often the focus, other dimensions of development are often included. The National Goals Panel 2000, for example, considers physical well-being; motor, social, and language development; and dispositions for learning as relevant to school readiness, in addition to cognition and knowledge (Kagan, Moore, & Bredekamp, 1995). Older children are assumed to be more *ready* and better able to profit from formal schooling (see Frick, 1986; Uphoff & Gilmore, 1986). The claim that older is better is based on a theory of development which privileges the contributions of biological maturation (see Kagan, 1990; Meisels, 1999; Smith & Shepard, 1988). Thus, voluntary delayed entry is more common among boys, because they are believed to mature more slowly than girls.

In some discussions of school readiness there is an implicit notion of a threshold of cognitive and social development. It is not assumed simply that "older is better," but rather, older is better until children achieve that prerequisite level of development that is required for them to succeed in school. That threshold is associated with a particular age.

Also implicit in the theory underlying policies and practices that delay school entry is the notion that the "gift of time" and general (out-of-school) experience outweigh the benefits of a school setting for a child deemed unready for kindergarten. This assumption has particularly important implications for low-income and minority children, who begin school on average with substantially lower academic skills than children from middle- and upper-income families (Adams, 1990; Stipek & Ryan, 1997; Whitehurst et al., 1994). An important policy question is under what conditions are these children at risk for school failure most likely to catch up with their more affluent peers? Are they better served by having more time out of school or by having more time in an instructional environment?

Early childhood education experts who oppose the trend toward later school entry stress the role of experience in learning and development. Their argument is based on the assumption that time in an instructional context is more valuable and will promote academic success better than additional biological maturation or than general experience out of school. The two positions on the issue of school entry age thus mirror rather well the age-old nature-nurture debate.

Experts who privilege experience over maturation also point out that development is uneven and multidimensional. A threshold for development cannot be established because

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a child's level of development varies across different dimensions. Thus, children are not likely to achieve the level considered important for school success in all domains at the same time.

The two positions also differ on where the responsibility for children's success resides. Proponents of delayed school entry for some if not all children focus on the preparation of the child for the program. Opponents argue that the policy is based on a Procrustean notion that the curriculum is set and children must be fit into it as it is. A more appropriate strategy is to adapt the curriculum to the developmental levels of the children who enter kindergarten, whatever their cognitive and social skills. They take the position that if children are faring poorly in kindergarten programs, the solution needs to be found in the school program not in the child.

Critics of voluntary delayed school entry are also concerned that the practice will exacerbate socioeconomic differences in academic skill levels. They reason that middle-class families are more likely to have financial resources for an extra year of preschool or high-quality childcare, and thus are more likely to hold out their children. This would effectively make middle- and upper-income kindergartners older, on average, than kindergartners from low-income families. The increased age of the middle-income children raises expectations and puts pressure on kindergarten teachers to increase the demands of the kindergarten curriculum, which puts low-income children at an even greater disadvantage.

Finally, experts who argue against holding children out point out that being "over-age" for grade is a strong predictor of later dropping out, even when achievement is held constant (Meisels, 1992). The practice of holding children out a year thus puts some children at risk of not completing high school.

Fortunately, this is a debate that can be informed by empirical evidence. There is a fair amount of research that directly addresses the assumptions on both sides. To that data we now turn.

Effects of Entry Age

Three strategies have been used to assess the effects of the age of school entry on children's academic achievement, and occasionally on social-emotional or motivational outcomes. First, studies have compared children who have delayed entry by a year with children who entered school when they were eligible. These studies are relevant to policy decisions about formal cutoff dates only inasmuch as they allow comparisons of children who are relatively old versus relatively young at school entry.

A second methodological strategy is to simply compare children in the same grade with different birth dates. In any one grade there is at least a 12-month spread in ages. Assuming that children's birth dates are randomly distributed, associations between this natural variation in age of entry and child outcomes suggest an age effect. Few of the studies using this methodology assess change in achievement over the school year; they therefore cannot be used to determine whether older children benefit relatively more from schooling than do younger children. They do, however, provide information on whether older children perform better on average than younger children.

The third and most powerful strategy compares children who are the same age but in different grades as well as children who are a year apart in age but in the same grade. This strategy provides information on the relative effects of an additional year of time (maturation and general, out-of-school experience) versus an additional year of schooling.

Tables 2, 3 and 4 summarize all studies after 1980 that were performed using these three methodologies. A cutoff of 1980 was used because there is some question about the relevance of data collected earlier when relatively few young children attended preschool or had day care. The review of research in this report is thorough, but not exhaustive. (Note: equal signs in the tables reflect a finding of no significant differences between the groups compared.)

Delayed versus On-Time Entry

Does delaying relatively young children's entry into kindergarten a year past the time they are eligible to enter increase their chances for success? Researchers have reasoned that if delayed school entry is beneficial, children who are held out a year should have lower retention rates and special education placement and higher achievement than children with similar characteristics who entered school when they were eligible (see Table 2).

The findings of such studies need to be interpreted very cautiously. Children who are held out of school do not represent a random sample, and it is very likely that qualities that led parents to decide to delay their child's entry into school contribute to differences found later between these children and children who began school "on time." Moreover, a finding of no difference is difficult to interpret because children who had been held out might have looked worse if they had not been held out. Retention is especially suspect as a dependent variable because it is possible that teachers are more reluctant to retain children who are already relatively older than their age-mates.

In addition to these methodological problems, findings from research are neither substantial nor consistent. One study found that children who delayed school entry by a year were less likely to be retained than children who entered school when they were eligible (May et al., 1995). Two

Table 2 Studies Comparing Delayed and Non-Delayed Entry Students

Reference	Sample	Comparison	Consequences of Delayed Entry
Byrd, Weitzman, & Auinger (1997)	National representative sample in National Health Interview Survey; ages 7-17; N=9079	*Delayed-entry* (old for age in grade, but never retained); *Control* (modal age for grade and not retained)	*Behavior Problem Index (BPI)*: Delayed entry group> non-delayed (difference especially large in adolescence)
Graue & DiPerna (2000)	Representative stratified random sample of Wisconsin school districts; 3rd graders; N=8595	*Redshirters* (entered kindergarten >= 72 months); *Control* (entered 60-71 months)	*Early exceptional needs services:* Redshirters 2.24 times > control group *3rd grade reading achievement:* Redshirters (including summer birthdays) = control group
May, Kundert, & Brent (1995)	Caucasion 1st - 12th graders in suburban NY school district; N=3238	*Delayed entry* (entered K one year later than eligible for Dec. 1 cutoff); *Control* (entered when eligible)	*Retention*: delayed entry < control *Placement in special education:* delayed entry > control
Kundert, May, & Brent (1995)	Caucasion 3rd - 12th graders in suburban NY school district; N=314	*Delayed entry* (entered K one year later than eligible for Dec. 1 cutoff); *Retained* (in grades K-5)	*Cognitive Abilities Test (CAT) at 2nd grade:* delayed > retained; *CTBS Tests at 2nd, 5th, & 7th grade* (with CAT covaried): delayed = retained

studies, however, reported that children who delayed school entry by a year were more, not less, likely to receive special education services (Graue & DiPerna, 2000; May et al., 1995). The two studies that examined academic achievement did not find significant differences between delayed- and non-delayed entry children (Graue & DiPerna, 2000), or delayed and retained children (Kundert, May, & Brent, 1995). But, as mentioned above, it cannot be determined whether the delayed children would have performed less well if they had not been delayed.

The findings of the Byrd et al. (1997) study are noteworthy because it is one of the few studies that examined possible long-term effects of delaying school entry. In their nationally representative and large sample there were increasing disparities in behavior problems between children who were older than their age-mates and children who were the modal age for their grade. Adolescents who were older because of retention had particularly high scores on the Behavior Problem Index, but children who had not been retained (and were thus presumably older because they had delayed school entry) also showed relatively high levels of behavioral problems. Mayer and Knutson (1999) did not look specifically at students who were over-age, but they too found that in a large nationally representative sample of 8-11 year olds, children with earlier birth dates (who were relatively old) showed more behavior problems than children who were relatively young for their grade (see Table 3). Again, the selection problem of the children who delay school entry makes interpretation of these findings difficult. But they suggest the importance of studying the experiences of older children that might contribute to behavioral problems. It is also possible that the relatively high levels of behavioral problems, and accompanying negative experiences and alienation among children who are over the modal age of their grade, is related to the high levels of over-age students dropping out of high school (House, 1989; Nason, 1991).

Age Differences

Interpretation of findings of studies examining naturally occurring age variations are less problematic than for the delayed-entry studies because birth dates are presumably randomly distributed. Although there is some variation across states and districts, most studies are done within a limited geographical area, in which case variation in children's ages would depend on their birth date, not the state or district policy. In large-scale or national studies, it is unlikely that district policies bias the findings in any systematic direction.

Table 3 Studies Assessing Child Outcomes Associated with Age of Kindergarten Entry

Reference	Sample	Comparison	Consequences of Age of Entry
Bickel, Zigmond, & Strayhorn (1991)	Pittsburgh 5th graders; N=222	Age as continuous variable over 12 months	*Math achievement: 1st grade entry:* older > younger; *5th grade:* no sign. age effect *Reading achievement & conduct:* no sign. age effect at any grade
Breznitz & Teltsch (1989)	Israeli 4th graders; N=137	*Older* (birth date, Jan. - March), *younger* (Oct. - Dec.)	*Reading & arithmetic achievement:* older > younger; *trait anxiety:* younger >older; *self esteem & socio-metric scores:* older = younger
Cameron & Wilson (1990)	N=315	(1) *Redshirts* (2) Sept. - Jan. birth dates; (3) Jan. - May; (4) May - Sept.	*Second-grade ITBS:* Sept-Jan > other three groups; *Fourth grade:* Sept-Jan > May-Sept.
Crosser (1991)	7th, 8th, & 9th graders in Ohio school districts; N=90	All summer birth dates (June 1-Sept. 30): (1) *young* (entered K at age 5); *old* (entered K at age 6)	*5th & 6th grade CTBS; reading:* older > younger (boys only); *math:* older = younger
Dietz & Wilson (1985)	Second graders in a Delaware school district; N=117	Three groups based on age at school entry: mean ages of 62, 66, & 71 months	*K readiness scores & ITBS achievement scores:* no significant age effects
Jones & Mandeville (1990)	South Carolina, grades 1, 2, 3, & 6; N=190,292	*Younger* (birth dates in Aug., Sept., or Oct.), *Older* (all other)	*South Carolina Basic Skills Assessment Program (BSAP):* older > younger; age effect declines from grade 1-6
Kinard & Reinherz (1986)	White, working-class 4th graders; N=488	Divided into 6, 2-month intervals, based on birth dates at school entry	*Information processing skills: at school entry:* older>younger; *K, 3rd, & 4th:* no significant age effects. *Grade, attention, anxiety & other socio-emotional measures, academic achievement & special needs services:* no significant age effects
Langer, Kalk, & Searls (1984)	9-, 13-, and 17-year olds; N=97,000 Caucasion and 17,000 Black students assessed in 1974-78	Age as continuous variable over 12-months	*National Assessment of Educational Progress: 9-year olds:* older>younger; *Retention:* younger>older; *13-year olds:* age effect significant, but much weaker; *17-year olds:* no age effect
McClelland, Morrison, & Holmes (2000)	White & Black children, K & 2nd; N=164	Age of K entry used as continuous variable	*IQ, PIAT, PPVT:* predicted by school entry age at K, but not at 2nd grade
May & Welch (1986)	Grades 3-6 in suburban school district: N=152	Birth dates divided into 4, 3-month intervals	*Gesell at K:* oldest > youngest; *Stanford Achievement Test at 2nd or 4th grade:* no significant age effects

Table 3 continued on next page

Table 3 continued Studies Assessing Child Outcomes Associated with Age of Kindergarten Entry

Reference	Sample	Comparison	Consequences of Age of Entry
Mayer & Knutson, (1999)	(a) 1980 census data on wages of men between 28-34 (b) CNLSY[1] 8-11 year olds	Birth dates: (1) Jan-March, (2) April-June, (3) July-Sept.	(a) *Adult earning:* Youngest (July-Sept.) had highest earnings. (b) *Behavior problems in 8-11-year olds:* older > younger *Reading and math achievement (PIAT):* younger > older
Spitzer, Cupp, & Parke (1995)	(a) Kindergartners; N=512 (b) Kindergartners; N=116	Age of entry as continuous variable	(a) *Teacher and peer ratings of social skills and popularity:* low but significant correlations with age of entry (b) *Teacher ratings of dependence:* significantly correlated with age of entry; *Peer rejection, loneliness, perceived competence and acceptance, and classroom behavior (CBI);* not significantly correlated to age
Stipek & Byler (2001)	predominantly poor children in rural and two urban communities, K-3rd grade (longitudinal); N=237	(a) *Old* (age 6 by Dec. 31 year entered K); *Intermediate* (age 5 by May 31 before K entry); *Young* (age 5 after May 31) (b) 54 pairs of children matched in age but one grade apart (K or 1), all children retested in their 3rd grade	(a) *Math & literacy tests, K/1:* oldest> youngest; *3rd grade:* no differences *Teacher achievement and social-behavioral ratings:* no age differences at K/1 or 3rd grade *Child self-ratings:* no differences at K/1 or 3rd grade (b) *math achievement:* 1st > K (matched on age); 3rd: older (late school entry) = younger (early school entry) *literacy achievement:* 1st = K; 3rd grade: younger = older *child self ratings in math & literacy:* 1st > K; 3rd: younger = older
Sweetland & De Simone (1987)	6th grade, upper-middle-class suburban school district: N=152	Birth dates divided into 4, 3-month intervals	*CTBS, grades 2-6:* older>younger (degree of difference declined after 3rd grade)

[1] National Longitudinal Survey of Youth, mother-child files

The findings related to the effect of age-of-school-entry on achievement vary, but looking across studies, the pattern is clear. Most studies report differences in the beginning grades of school which favor older children (Cameron & Wilson, 1990; Crosser, 1991 [boys only]), and some studies report differences in the later elementary grades (Breznitz & Teltsch, 1989; Cameron & Wilson, 1990; Crosser, 1991). But a few studies found no difference in some or all achievement tests, even in kindergarten (Dietz & Wilson, 1985; Kinard & Reinherz, 1986). And in most of the studies that found significant age differences in the early grades, the differences were weaker (Jones & Mandeville, 1990; Langer, Kalk, & Searls, 1984; Sweetland & De Simone, 1987) or disappeared altogether by the upper elementary grades (Bickel, Zigmond, & Strayhorn, 1991; Kinard & Reinherz, 1986; McClelland, Morrison, & Holmes, 2000; May & Welch, 1986; Stipek & Byler, 2001).

In summary, the empirical evidence suggests some small advantage of being relatively older than classmates which diminishes with age. This does not mean that "older is better" in some absolute sense. All of these studies used relative age as the independent variable. Depending on the birth-date cutoff in the state or community, a relatively old child in one study could have been an average-aged child in another study. The findings also do not suggest that older children learn more in school than younger children. The age

Table 4 Studies Comparing Age and Schooling as Predictors of Cognitive Outcomes

Reference	Sample	Comparison	Age and Grade Effects
Bisanz, Morrison, & Dunn (1995)	N=56	*Old K* (turned 6 just after cutoff date); *Young 1st graders* (turned 6 just before cutoff date); *Old 1st graders* (turned 6 before cutoff date, but a year older than old K)	*Arithmetic accuracy*: schooling effect significant; *Conservation:* age effect significant
Cahan & Davis (1987)	Israeli 1st & 2nd graders; N=6269	Compared age effects within grade to grade (schooling) effects (between grade, holding age constant)	*Math & reading comprehension*: effect of one year of school twice the effect of one year of age
Cahan & Cohen (1989)	4th, 5th, & 6th graders; N=12,090	Compared age effects within grade to grade (schooling) effects (between grade, holding age constant)	*12 cognitive tasks (CAT)*: school effects larger on all verbal and numerical tests and 2 of 5 figural tests; age effects modestly larger on 2 figural tests
Crone & Whitehurst (1999)	Children originally enrolled in New York Head Start Centers; N=337	Within-grade comparison: *Youngest* (Oct. - Nov. birth dates); *middle* (Feb. – Sept.); *Oldest* (Dec. – Jan.) Between-grade comparison: approx. same age (e.g., youngest in one grade, oldest in previous grade)	*Emergent literacy skills: within grade comparison: preschool & K*: older > younger (difference smaller in K); *1st & 2nd*: no significant age differences *Between-grade comparison*: youngest K > oldest preschool; youngest 2nd > oldest 1st
Ferreira & Morrison (1994)	Middle-class Canadians, identified by teachers as "average"; N=48	*Less schooled* (started K at 5 yrs 7 mos); *more schooled* (started 1st at 5 yrs. 9 mos.); retested one year later (in K or 1st) and two years later (in 1st or 2nd)	*Grammar tasks involving multiword subjects:* 1st>K, 2nd>1st (schooling effect); *pronouns*: age 7>6=5 (age effect)
Morrison, Griffith, & Alberts (1997)	Diverse SES; N=539	*Old K* (turned 6 just after cutoff date); *Young 1st graders* (turned 6 just before cutoff date); *old 1st graders* (turned 6 before cutoff date, but a year older than old K)	*Math & reading achievement, end of K or 1st:* young first>old K; old and young 1st graders made same gains, both greater than old K (schooling effect--greater for reading than math); *end of 1st grade:* old 1st>young first (age effect)
Morrison, Smith, & Dow-Ehrensberger (1995)	Middle- to lower-middle class; N=20	*Young 1st graders* (turned 6 just before cutoff date); *old K* (turned 6 just after cutoff date)	*Memory tasks, phonemic segmentation, reading achievement:* pretest: no group differences; end of year: 1st>K (old Ks made little progress in K, & no more improvement during 1st than young 1st graders)
Varnhagen, Morrison, & Everall (1994)	N=79	*Young 1st graders* (turned 6 just before cutoff date); *old K* (turned 6 just after cutoff date)	*Story recall and story production skills:* associated with age, not schooling; *Causal relations recall, and complexity of stories produced:* associated with schooling

differences, when found, were usually stronger at the beginning of school than in the later grades, indicating that the younger children actually tended to learn more, often catching up with their older peers after a few years in school.

> *The proportion of risk attributed to race and socioemotional factors was 13 times larger than that contributed by age.*

Even in the early elementary grades the magnitude of the effect of age appears to be small. Most studies do not compare age to other factors influencing student achievement, but in one that did, the proportion of risk attributed to race and socioeconomic factors was 13 times larger than that contributed by age (Jones & Mandeville, 1990).

Only a few studies have examined associations between age of entry and social-motivational variables. One study of a small sample of Israeli fourth graders found that younger children scored higher on a measure of trait anxiety; there were no age effects on self-esteem or socio-metric scores (Breznitz & Teltsch, 1989). Teacher ratings of children's social skills and popularity were associated with age of entry in one study, with older children receiving higher scores (Spitzer, Cupp, & Parke, 1995). Peer rejection, loneliness, perceived competence, and classroom behavior were not associated with age. Two studies found no age effects on attention, anxiety, and a variety of social-emotional measures for children from kindergarten through third (Stipek & Byler, 2001) and fourth grade (Kinard & Reinherz, 1986). Taken together, the research provides little support for concerns about the social-emotional or motivational development of children who enter school at a relatively young age.

Schooling versus Age

The studies that are most relevant to the age-of-entry debate compare the effects of a year of maturation and general experience (out of school) to a year of schooling. As mentioned above, this analysis is done by comparing children who are the same age but in different grades and children who are in the same grade but approximately a year apart in age. The first comparison provides information on the effect of a year of schooling, holding age constant. The second comparison provides information on the effect of chronological age, holding the number of years of schooling constant.

Findings from studies using these methods suggest that schooling is the more potent variable in most of the cognitive skills measured. In math and most aspects of reading and literacy in most studies, children who were in school gained more in a year than children the same age who were not in school (Bisanz, Morrison, & Dunn, 1995; Cahan & Davis, 1987; Crone & Whitehurst, 1999; Ferreira & Morrison, 1994; Morrison et al., 1997; Morrison, Smith, & Dow-Ehrensberger, 1995; Varnhagen, Morrison, & Everall, 1994). Literacy assessments in these studies included basic reading skills as well as grammar, phonemic segmentation, causal relationships recall, and complexity of stories produced. The findings of two additional studies suggest, furthermore, that age was not a factor in how much children benefited from a year of schooling (Morrison et al., 1997; Morrison et al., 1995).

Age was a better predictor than amount of schooling for children's performance on conservation tasks in one study (Bisanz et al., 1995), two of five figural tests given in another study (Cahan & Cohen, 1989), use of pronouns (Ferreira & Morrison, 1994), and story recall and production skills (Varnhagen et al., 1994) in two other studies, repectively. Thus, biological maturation and general, out-of-school experience appear to be more important contributors to some cognitive competencies.

Although chronological age was more strongly associated with a few cognitive outcomes, the studies comparing age and school effects suggest that educational intervention found in schools contributes more to children's cognitive competencies overall than does maturation, and that relatively young children benefit from school as much as relatively older children. The school effect is strong in an absolute as well as a relative sense. In the Crone and Whitehurst (1999) study, for example, a year in school explained 62% of the literacy skill improvements at the kindergarten level, and 81% at second grade. Cahan and Davis (1987) report that the effect of a year in school was twice the effect of a year of age.

An Illustrative Study

Most studies conducted on entry age into kindergarten include predominantly middle-class children. But as mentioned above, policy decisions related to age of entry are particularly critical for low-income children because they are at greatest risk for school failure. As an example of research on age of school entry I describe next one of my own studies, which focuses on very low-income children (see Stipek & Byler, 2001). [1]

The study involved 237 children in three different geographical locations: a northeastern, predominantly white rural community, a northeastern, predominantly African-American urban community, and a western, predominantly Latino urban area. The children were distributed among more than 80 schools and 150 classrooms.

In addition to examining academic achievement, we assessed age differences in children's perceptions of themselves and of school. We reasoned that if younger children perform less well academically than older children, they might also have relatively low perceptions of their academic competencies, develop a less positive relationship with their teacher, and enjoy school less.

The study's longitudinal design provided data on children from kindergarten through the third grade. We were therefore able to determine whether any differences evident in kindergarten persisted into the middle elementary grades. Because concerns about maturity are often greater for boys than for girls, gender differences were also examined. We had also planned to examine redshirting practices, but in the sample of over 200 low-income children, only five children (four boys and one girl) delayed kindergarten entry.

For all of the children in the sample we had Peabody Picture Vocabulary Test (PPVT) scores from the time children were 60 months old. At the end of kindergarten or first grade and again in third grade we gave both math and literacy assessments, using a combination of traditional and more reform-minded (e.g., strategies for solving word problems, verbal comprehension and writing) achievement tests. Teachers also rated children's math and reading performance in class.

Using the Feelings about School measure (Valeski & Stipek, 2001), children rated their academic competencies and their feelings about school and their teacher. Teachers rated children's social competence and academic engagement on tasks, and the level of closeness and conflict in their relationships with each study child.

We used two strategies to assess age of entry effects. First, children were divided into three age groups: (1) *old* (n = 77; turned six by December 31 of the year they entered kindergarten); (2) *intermediate* (n = 98; turned five by May 31, before they entered kindergarten); and (3) *young* (n = 62; turned five after May 31 and before they entered kindergarten or in the fall after entering kindergarten).[2] Second, we compared two groups of children matched in age but a year apart in grade.

The studies comparing age and school effects suggest that educational intervention found in schools contributes more to children's cognitive competencies overall than does maturation.

The first set of analyses of children in kindergarten revealed that the oldest children scored significantly higher than the youngest children on both the reading and math achievement tests, but no differences were found for teacher ratings of academic performance. The three age-groups were not significantly different from each other on all of the teacher ratings of children's social competence, academic engagement, and their relationships with children. Only one child rating was significantly associated with age; the oldest children reported more positive feelings about their teacher than the intermediate-age and youngest children. When the same age comparisons were computed for children when they were in the third grade, the early achievement advantage of the older group on the math and literacy achievement tests disappeared, although older children's more positive ratings of their teacher remained.

The second analytic strategy was to create a matched sample of 54 pairs of children who were the same age, gender and race, but in different grades (kindergarten versus first grade). This allowed us to assess the effects of a year of schooling holding age constant. The children who entered school very young (who were in first grade at the first time of testing) were achieving at a significantly higher level in math, but not in literacy, than children who entered school a year older (who were in kindergarten at the time of testing, but the same age as the first graders). The first graders also had significantly higher perceptions of their skills in both math and literacy. No other child outcomes showed significant differences.

Identical analyses were repeated for these children's third-grade outcomes. For these analyses the children were all in the same grade, but the two groups differed in age by a year. The achievement advantage in math shown by the first graders over same-aged peers in kindergarten was not apparent when all of the children were in the third grade. Combined, these two findings suggest that the earlier advantage of the children who had entered school at a relatively younger age was a consequence of having an additional year of schooling. Likewise, the two groups were not significantly different on any of the child self-ratings or teacher ratings. Thus, by third grade, children who entered kindergarten an entire year apart in age did not differ significantly on the variables we measured.

In brief, the findings of this study are consistent with the pattern of findings in previous studies. Comparing the contributions of time (chronological age) and academic skills, school was more potent. Furthermore, children who

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entered school relatively young did not appear to be disadvantaged academically in the long run.

Returning to the Policy Question

What are the implications of the findings reviewed above for the original question: at what age should children enter school? Briefly, the data indicate that moving back the birth date for school entry by one to three months—the most common change seen over the last decade—will not address policy makers' concerns about student readiness for kindergarten or their academic performance later on.

Studies comparing the academic achievement of children who differed by as much as a year in their school entry age have found no differences or very modest and diminishing differences. There is also no evidence suggesting some kind of threshold—a particular age at which most children are prepared for formal schooling.

Possible negative effects of raising the school entry age must also be considered. Requiring children to be older when they enter kindergarten increases teachers' expectations for their ability to handle structured academic work. Combined with the current stress on children's standardized achievement test performance, there is a risk that kindergarten will begin to resemble first grade and be less and less developmentally appropriate.

What about delaying school entry for some children? Only a few studies have examined the effects of voluntarily delaying children's entry into kindergarten. The evidence that exists does not support this practice as a general rule. But the evidence is too meager and open to interpretation to be used as a guide for individual decision making. Although evidence on age differences suggests that younger children are not necessarily disadvantaged, little is known about the consequences of delaying entry for the selective sample of children who have done so.

Delaying school entry for children, whether by changing the law or through parents' voluntary decisions, may, however, be disadvantageous for low-income children, who already begin school with relatively poor cognitive skills. First, the evidence is very clear that out-of-school time contributes to the racial and social class achievement-gap more than does in-school time. It is during the summer, for example, that low- and middle-income children's achievement diverges the most (Entwisle & Alexander, 1992). Second, middle-income children are also more likely to attend high-quality preschool or day care programs, which have been shown to contribute to children's language and other cognitive skills (Bowman, Donovan, & Burns, 2001). There is, therefore, reason to expect children from middle-class and affluent families to progress more in their academic skills than low-income children while they "wait" to become eligible to begin kindergarten, thus making the gap in skills wider than it already is at school entry. Children with special needs are especially disadvantaged by delaying entry into a formal educational setting because they are less likely to be identified and receive early intervention.

Are Readiness Tests a Good Alternative to Age as a Criterion for School Entry?

If age, at least within the range of about 12 months, is not a good predictor of how much children benefit from school, should we consider alternative strategies to determine when children should begin kindergarten? What about a test that directly assesses children's readiness for school?

School readiness tests are used in many districts and schools for a variety of productive purposes, such as to identify special problems that might require early intervention. Early assessments can also be used by teachers to guide instructional and program planning. The research evidence does not, however, support readiness tests as an alternative to age for determining school entry.

Extant readiness tests assess social interaction skills, general cognitive skills (e.g., perceptual skills, auditory memory, visual matching, language, and listening), and specific academic knowledge (e.g., alphabet, color naming, counting, identification of body parts). Social knowledge tests have been criticized for being culturally biased (Meisels, 1996), and many other tests have been criticized for having poor validity (Shepard & Smith, 1986; Meisels, 1996). When the widely used Metropolitan Readiness Test is used for individual placement, it is estimated that about one-third of all children tested would be misidentified (Gredler, 1992; see also Carlton & Winsler, 1999). Researchers have also pointed out that development is episodic and uneven (Bowman et al., 2001; Cronbach, 1990), rendering assessment at any single point in time a poor predictor of a child's skills, even a short time later. Another problem is that readiness tests that include items which require teaching (e.g., color and shape names, letter identification, factual knowledge) unfairly disadvantage children who have not

The research evidence does not support readiness tests as an alternative to age for determining school entry.

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been taught them. Ironically, these are the children who most need the instruction kindergarten programs can provide.

Furthermore, readiness tests do not assess the qualities kindergarten teachers view as important for school success. In a national study that asked kindergarten teachers how important each of 15 qualities was for a child to be ready for kindergarten, teachers rated highest: (1) "is physically healthy, rested, and well-nourished;" (2) "can communicate needs, wants, and thoughts verbally in child's primary language," and (3) "is enthusiastic and curious in approaching new activities, respectively (NCES, 1993). The qualities most often found on readiness tests were rated the lowest of the 15 mentioned: (1) ability to identify primary colors and basic shapes; (2) ability to use pencils and paint brushes; (3) knowledge of the alphabet; and (4) ability to count to 20. (See also Piotrkowski, Botsko, & Matthews, 2000.)

The meaninfgul question is not whether *a child is ready to learn, but rather* what *a child is ready to learn.*

A more fundamental problem with "readiness" tests concerns the concept of readiness itself. Their use as a criterion for school entry is implicitly based on the premise that children are not able to take advantage of school until they are "ready," and that biological maturation (time) and experience outside of school prepares them better than experience in a school context. The evidence reviewed above supports neither of these assumptions.

Rethinking "Readiness"

Many early childhood experts have called into question the very notion of "readiness." Clearly all children at all ages are "ready to learn." The meaningful question is not *whether* a child is ready to learn, but rather *what* a child is ready to learn. Even "reading readiness" – a concept with a long history in early childhood development – has little meaning in the context of current conceptualizations of emerging literacy, which includes general knowledge, language and vocabulary skills, and even early scribbling. Literacy, according to current experts, begins to develop long before children enter school (Bowman et al., 2001; National Research Council, 1998). Current conceptions of mathematics also embrace the notion of gradual development beginning early in life. Recent work on the development of mathematical understanding shows that an understanding of basic number concepts is seen and can be promoted in toddlers (Griffin & Case, 1998).

The concept of readiness for school is also losing significance as increasing numbers of children attend preschool or day care programs. Research on early childhood interventions and especially on programs designed to promote cognitive skills provides compelling evidence that preschool-aged children learn in a variety of school-like settings and from a variety of instructional approaches (see Barnett & Boocock, 1998; Bowman et al., 2001). Ideally, the transition from preschool programs to kindergarten and formal schooling should be seamless and continuous, not the abrupt shift to a completely different social context and set of academic demands that the notion of readiness brings to mind.

Many early childhood experts have turned the issue of readiness on its head to focus on schools rather than children (see, for example, Graue, 1993; Kagan, 1990). To be sure, some children are not "ready" to sit at desks and do paper-and-pencil activities for long periods of time when they turn five or even six years old. But that doesn't mean that they cannot benefit from any kind of instruction. The appropriate policy question, then, is not what children need to know or be able to do when they get to school, but what schools need to do to meet the social and educational needs of the children who walk through their doors.

Policy Implications

In summary, the research reviewed in this report does not support a policy of moving the birth date for school entry to increase the average age of children entering school. Even if the goal is to improve children's performance on achievement tests, policies that result in a slightly older school population will have short-term and modest effects, if any.

A policy issue that is related to school entry age concerns the advisability of making kindergarten compulsory. The research summarized in this report provides good evidence for the value of an educational program for five-year-olds. The value of making kindergarten compulsory depends on whether it would actually impact kindergarten enrollment. Enrollment is already very high, and many parents who currently do not enroll their children in kindergarten use other educational options (preschools or home schooling), which would most likely continue through a waiver process even if kindergarten was made compulsory. Nevertheless, although compulsory kindergarten laws may be largely symbolic, evidence for the value of schooling for children who are kindergarten age is consistent with such a policy.

Despite the limitations of age as a predictor of children's cognitive and social competencies, from a policy perspective

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it is preferable to using tests as a criterion for school entry. Age is equitable and less vulnerable to cultural or social class biases. Within the range of options currently used, the particular birth date that is used as a cutoff is somewhat arbitrary.

If anything, the evidence suggests reducing the age of school entry to below the current range. Some of the studies reviewed show that the youngest children who currently enter school, young five-year-olds and some four-year-olds, do benefit from their experience in school and in fact learn at the same rate as children who are older when they enter school. Studies comparing "time" versus "school" on children's cognitive skills provide substantial evidence for the advantage of an educational setting. Combined with findings not reviewed in this report, which demonstrate the benefits of quality day care and preschool programs (Bowman et al., 2001), an argument is easy to make for providing educational experiences for four-year-olds—either in schools or in other settings. Because low-income children are the least likely to be able to pay for high quality programs, and because they enter school on average with lower academic skills, limited public funding should be focused initially on this group.

Whether children would benefit more from beginning school earlier or attending a preschool program is debatable. I suspect that young children's needs would be better served in preschool programs, at least while schools are under current extreme pressures to produce high scores on achievement tests. But the important issue is not where young children's educational needs are met, but whether the programs they are offered are of high quality and appropriate for their developmental level.

Fortunately, a great deal is known about the characteristics of high quality, developmentally appropriate programs which address the needs of children, whatever their entering skill levels (see Bowman et al., 2001). Quality programs, however, require quality teachers. Changing the school entry age, in either direction, will not reduce the variability in children's academic and social skills. Whatever the age of entry, there will be at least 12 months between the oldest and the youngest children, and teachers will need to address a wide range of social and learning needs.

We would do a much greater service to children if we focused more on making school ready for children than on making children ready for school.

Assessing children's diverse skills related to the school curriculum, and tailoring teaching and learning opportunities to the variety of understandings, learning styles, and social skills the children in any given class will exhibit requires well-trained teachers. Anything less than this will not serve the educational needs of children who, regardless of the cutoff age for school entry, will vary considerably in their social, emotional, and intellectual skills. We would do much greater service to children if we focused more on making school ready for children than on making children ready for school.

Notes

[1]This work has been supported by a grant from the John D. and Catherine T. MacArthur Foundation Research Network on Successful Pathways through Middle Childhood, with supplementary funding from the W. T. Grant Foundation. The larger study on school transition is directed by Deborah Stipek, Heather Weiss, Penny Hauser-Cram, Walter Secada, and Jennifer Greene.

[2]Although the age-of-entry varied somewhat among the study's different sites, children's category of young, intermediate, or old would have changed very little if we had grouped based on relative age within each locality.

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References

Adams, M. (1990). *Beginning to read: Thinking and learning about print.* Cambridge, MA: MIT Press.

Barnett, W., & Boocock, S. (Eds.). (1998). *Early care and education for children in poverty: Promises, programs, and long-term outcomes.* Buffalo, NY: State University of New York Press.

Bickel, D., Zigmond, N., & Strayhorn, J. (1991). Chronological age at entrance to first grade: Effects on elementary school success. *Early Childhood Research Quarterly, 6,* 105-117.

Bisanz, J., Morrison, F., & Dunn, M. (1995). Effects of age and schooling on the acquisition of elementary quantitative skills. *Developmental Psychology, 31,* 221-236.

Bowman, B., Donovan, S., & Burns, S. (Eds.). (2001). *Eager to learn: Educating our preschoolers.* Washington DC: National Academy Press.

Brent, D., May, D., & Kundert, D. (1996). The incidence of delayed school entry: A twelve-year review. *Early Education and Development, 7,* 121-135.

Breznitz, Z., & Teltsch, T. (1989). The effect of school entrance age on academic achievement and social-emotional adjustment of children: Follow-up study of fourth graders. *Psychology in the Schools, 26,* 62-68.

Byrd, R., Weitzman, M., & Auinger, P. (1997). Increased behavior problems associated with delayed school entry and delayed school progress. *Pediatrics, 100,* 664-661.

Cahan, S., & Cohen, N. (1989). Age versus schooling effects on intelligence development. *Child Development, 60,* 1239-1249.

Cahan, S., & Davis, D. (1987). A between-grade-levels approach to the investigation of the absolute effects of schooling on achievement. *American Education Research Journal, 24,* 1-12.

Cameron, M., & Wilson, B. (1990). The effects of chronological age, gender, and delay of entry on academic achievement and retention: Implications for academic redshirting. *Psychology in the Schools, 27,* 260-263.

Carlton, M., & Winsler, A. (1999). School readiness: The need for a paradigm shift. *School Psychology Review, 28,* 338-352.

Cosden, M., Zimmer, J., & Tuss, P. (1993). The impact of age, sex, and ethnicity on kindergarten entry and retention decisions. *Educational Evaluation and Policy Analysis, 15,* 209-222.

Cronbach, L. (1990). *Essentials of psychological testing* (5th ed.). New York: Harper & Row.

Crone, D., & Whitehurst, G. (1999). Age and schooling effects on emergent literacy and early reading skills. *Journal of Educational Psychology, 91,* 604-614.

Crosser, S. (1991). Summer birth date children: Kindergarten entrance age and academic achievement. *Journal of Educational Research, 84,* 140-146.

Dietz, C., & Wilson, B. (1985). Beginning school age and achievement. *Psychology in the Schools, 22,* 93-94.

Entwisle, D., & Alexander, K. (1992). Summer setback: Race, poverty, school composition and mathematics achievement in the first two years of school. *American Sociological Review, 57,* 72-84.

Ferreira, F., & Morrison, F. (1994). Children's metalinguistic knowledge of syntactic constituents: Effects of age and schooling. *Developmental Psychology, 30,* 663-678.

Frick, R. (1986). In support of academic redshirting. *Young Children, 41*(2), 9-10.

Graue, M. E. (1993). *Ready for what? Constructing meanings of readiness for kindergarten.* Albany, NY: State University of New York Press.

Graue, E., & DiPerna, J. (2000). Redshirting and early retention: Who gets the "gift of time" and what are its outcomes? *American Educational Review Journal, 37,* 509-534.

Gredler, G. (1992). *School readiness: Assessment and educational issues.* Brandon, VT: Clinical Psychology Publishing Co., Inc.

Griffin, S., & Case, R. (1998). Re-thinking the primary school math curriculum: An approach based on cognitive science. *Issues in Education, 4,* 1-51.

House, E. (1989). Policy implications of retention research. In L. Shepard & M. Smith (Eds.), *Flunking grades: Research and policies on retention* (pp. 202-213). Philadelphia: The Falmer Press.

Jones, M., & Mandeville, K. (1990). The effect of age at school entry on reading achievement scores among South Carolina students. *Remedial and Special Education, 11,* 56-62.

Kagan, S. (1990, December). Readiness 2000: Rethinking rhetoric and responsibility. *Phi Delta Kappan, 72,* 272-279.

Kagan, S., Moore, E., & Bredekamp, S. (Eds.). (1995). *Reconsidering children's early development and learning: Toward shared beliefs and vocabulary.* Washington, DC: National Education Goals Panel.

Kinard, E., & Reinhertz, H. (1986). Birthdate effects on school adjustment: A longitudinal study. *Journal of Educational Research, 79,* 366-372.

Kundert, D., May, D., & Brent, D. (1995). A comparison of students who delay kindergarten entry and those who are retained in grades K-5. *Psychology in the Schools, 32,* 202-209.

Langer, P., Kalk, J., & Searls, D. (1984). Age of admission and trends in achievement: A comparison of Blacks and Caucasians. *American Educational Research Journal, 21,* 61-78.

May, D., Kundert, D., & Brent, D. (1995). Does delayed school entry reduce later grade retentions and use of special education services? *Remedial and Special Education, 16,* 288-294.

May, D., & Welch, E., (1986). Screening for school readiness: The influence of birthday and sex. *Psychology in the Schools, 23,* 100-105.

Mayer, S., & Knutson, D. (1999). Does the timing of school affect how much children learn? In S. Mayer & P. Peterson (Eds.), *Earning and learning: How schools matter* (pp. 79-102). Washington DC: Brookings Institution Press.

McClelland, M., Morrison, F., & Holmes, D. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly, 15,* 307-329.

Meisels, S. (1992). Doing harm by doing good: Iatrogenic effects of early childhood enrollment and promotion policies. *Early Childhood Research Quarterly, 7,* 155-174.

Meisels, S. (1996). Performance in context: Assessing children's achievement at the outset of school. In A. Sameroff & M. Haith (Eds.), *The five to seven year shift: The age of reason and responsibility* (pp. 408-431). Chicago: University of Chicago Press.

Meisels, S. (1999). Assessing readiness. In R. Pianta & M. Cox (Eds)., *The transition to kindergarten* (pp. 39-66). Baltimore: Paul H. Brookes.

Morrison, F., Griffith, E., & Alberts, D. (1997). Nature-nurture in the classroom: Entrance age, school readiness, and learning in children. *Developmental Psychology, 33,* 254-262.

Morrison, F., Smith, L., & Dow-Ehrensberger, M. (1995). Education and cognitive development: A natural experiment. *Developmental Psychology, 31,* 789-799.

Nason, R. (1991). Retaining children: Is it the right decision? *Childhood Education, 67,* 300-304.

National Center for Education Statistics (NCES). (1993). *Public school kindergarten teachers' views on children's readiness for school.* Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.

National Center for Education Statistics. (1997). *The elementary school performance and adjustment of children who enter kindergarten late or repeat kindergarten: Findings from national surveys.* Washington DC: U.S. Department of Education (NCES98-097).

National Research Council, Committee on the prevention of reading difficulties in young children. C. Snow, S. Burns, & P. Griffin (Eds.). (1998). *Preventing reading difficulties in young children.* Washington DC: National Academy Press.

Piotrkowski, C., Botsko, M., & Matthews, E. (2000). Parents' and teachers' beliefs about children's school readiness in a high-need community. *Early Childhood Research Quarterly, 15,* 537-558.

Shepard, L., & Smith, M. (1986). Escalating academic demand in kindergarten: Counterproductive policies. *The Elementary School Journal, 89,* 135-145.

Smith, M., & Shepard, L. (1988). Kindergarten readiness and retention: A qualitative study of teachers' beliefs and practices. *American Educational Research Journal, 25,* 307-333.

Spizter, S., Cupp, R., & Parke, R. (1995). School entrance age, social acceptance, and self-perceptions in kindergarten and 1st grade. *Early Childhood Research Quarterly, 10,* 433-450.

Stipek, D., & Byler, P. (2001). Academic achievement and social behaviors associated with age of entry into kindergarten. *Journal of Applied Developmental Psychology, 22,* 175-189.

Stipek, D., & Ryan, R. (1997). Economically disadvantaged preschoolers: Ready to learn but further to go. *Developmental Psychology, 33,* 711-723.

Sweetland, J., & De Simone, P. (1987). Age of entry, sex, and academic achievement in elementary school children. *Psychology in the Schools, 234,* 406-412.

Uphoff, J., & Gilmore, J. (1986). Pupil age at school entrance: How many are ready for success? *Young Children, 41*(2), 11-16.

Valeski, T., & Stipek, D. (2001). Young children's attitudes toward school: Causes and consequences. *Child Development, 72,* 1198-1213.

Varnhagen, C., Morrison, F., & Everall, R. (1994). Age and schooling effects in story recall and story production. *Developmental Psychology, 30,* 969-979.

Whitehurst, G., Epstein, J., Angell, A., Payne, A., Crone, D., & Fischel, J. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology, 86,* 542-55.

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Purpose

Social Policy Report (ISSN 1075-7031) is published four times a year by the Society for Research in Child Development. Its purpose is twofold: (1) to provide policymakers with objective reviews of research findings on topics of current national interest, and (2) to inform the SRCD membership about current policy issues relating to children and about the state of relevant research.

Content

The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for policies affecting children. The Society recognizes that few policy issues are noncontroversial, that authors may well have a "point of view," but the *Report* is not intended to be a vehicle for authors to advocate particular positions on issues. Presentations should be balanced, accurate, and inclusive. The publication nonetheless includes the disclaimer that the views expressed do not necessarily reflect those of the Society or the editors.

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Social Policy Report

Social Policy Report

Giving Child and Youth Development Knowledge Away

Volume XVI, Number 3 2002

Emotions Matter: Making the Case for the Role of Young Children's Emotional Development for Early School Readiness

C. Cybele Raver

Summary

This Social Policy Report considers the importance of young children's emotional development for their school readiness, suggesting that social scientists can provide policy makers with concrete ways to conceptualize, measure and target young children's emotional adjustment in early educational and child care settings. This Report then reviews a recent and persuasive body of rigorous research, to determine whether children's emotional adjustment can be significantly affected by interventions implemented in the preschool and early school years.

Results of this review suggest that family, early educational, and clinical interventions offer policy makers a wide array of choices in ways that they can make sound investments in young children's emotional development and school readiness. This research suggests that, while young children's emotional and behavioral problems are costly to their chances of school success, these problems are identifiable early, are amenable to change, and can be reduced over time.

What kinds of investments should policy makers be advised to make, at what point in young children's development, and in what settings? While modest investments in low-cost interventions initially may seem appealing, this report suggests that there are few bargains to be had when investing in young children's emotional adjustment. With this caveat in mind, the findings of this report suggest that policy makers should broaden early elementary educational mandates for school readiness to include children's emotional and behavioral adjustment as key programmatic goals. Policy makers should consider targeting young children's emotional adjustment prior to school entry, in diverse settings such as Head Start, child care settings, as well as in the first few years of school. Finally, young children's emotional adjustment can serve as an important benchmark of programmatic success in other policy arenas focusing on child welfare, family support, and economic self-sufficiency, as well as in education.

A Publication of the Society for Research in Child Development **Article begins on page 3**

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From the Editor

This issue addresses the importance of young children's emotional development for school readiness.

There is currently at the national level a great deal of concern for literacy and learning to read. Certainly literacy could not be more important. Children frequently fail in school because they fall behind in acquisition of basic skills, early in their school careers.

This report, however, highlights the interrelatedness of development, particularly early in life. Young children cannot learn to read if they have emotional and behavioral problems that distract them from reading lessons; such problems interfere with the acquisition of basic early skills. Two sidebars offer additional information on early emotional development and the development of self-regulation.

Emotional development and behavioral self-regulation are as important to early development as learning to read. In order to promote literacy, early educational programs have to attend to the whole child, attending also to the promotion of emotional development and health. Head Start was originally founded (by distinguished developmental psychologists such as Edward Zigler, Shepherd White, and Bettye Caldwell) with exactly this view of the whole child. And social and emotional development are part of the performance standards for early Head Start and Head Start. In the national evaluation of Head Start, social and emotional development were listed by staff as being most important. Now as conversations begin about moving Head Start to the Education Department, it is critical that we maintain this view that attends to emotional as well as cognitive development. This article presents the research justification for doing that.

The article also summarizes literature demonstrating that a variety of interventions can help young children who have already developed emotional and behavioral adjustment problems become more prepared for school. We know what to do and how to do it—in regard to promoting early development and preparing children for school; it is just a matter of basing our decisions on what we know about early child development.

Hopefully, this issue of the *Social Policy Report* will contribute to making that happen.

Lonnie R. Sherrod, Editor

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Emotions Matter: Making the Case for the Role of Young Children's Emotional Development for Early School Readiness

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Recently, policy makers, researchers and educators have intensified their interest in supporting young children's readiness to learn as they enter school (National Education Goals Panel, 1998). Surveys of teachers suggest there is justifiable cause for concern. For example, in one recent, nationally representative survey of over 3,000 teachers, 30% of the Kindergarten teachers reported that at least half of the children in their class lacked academic skills, had difficulty following directions, and working as part of a group, and 20% reported that at least half the class had problems with social skills (Rimm-Kaufman, Pianta & Cox, 2000). The portrait that emerges from these statistics is one where many children are not sufficiently ready to make the transition to Kindergarten. Exposed to a wide range of psychosocial stressors, children in poor neighborhoods are at greater risk for developing emotional and social difficulties (Dodge, Pettit & Bates, 1994; Brooks-Gunn, Duncan, & Aber, 1997). Schools in low-income communities are therefore likely to be called upon to meet the needs of a greater number of young children with behavioral problems within Kindergarten classrooms (Conduct Problems Prevention Research Group, 1999; Rimm-Kaufman, et al., 2000). Conversely, emotional skills among low-income children may serve an important protective function, whereby children who are able to effectively handle their emotions and behavior despite exposure to multiple stressors are more likely to do better, academically, than their peers (Raver & Zigler, 1997). In this light, what can developmental psychologists tell policy-makers about supporting young children's school readiness?

Children who are emotionally well-adjusted have a significantly greater chance of early school success while children who experience serious emotional difficulty face an increased risk of early school difficulty.

From the last two decades of research, it is unequivocally clear that children's emotional and behavioral adjustment is important for their chances of early school success. Certainly, cognitive maturity plays a central role in children's academic performance. However, psychologists' and educators' emphasis on cognition and on children's academic preparedness continues to overshadow the importance of children's social and emotional development for early school readiness (Aber, Jones, & Cohen, 2000; Hyson, 1994; Fantuzzo, et al., 1999; Raver & Zigler, 1997). This message is not new—what is new, however, is the emergence of a powerfully persuasive body of research on ways to support young children's emotional, behavioral and academic adjustment just as policy interest in early school readiness is "heating up." With this window of opportunity in mind, the following paper will make three, inter-related points:

1. Young children's emotional adjustment matters. Children who are emotionally well-adjusted have a significantly greater chance of early school success while children who experience serious emotional difficulty face grave risks of early school difficulty.

2. Recent advances in developmental and clinical research suggest that children vary in their levels of emotional competence and relative risk for developing behavioral and emotional difficulties. Developmental research offers several frameworks for understanding the child, family, classroom and environmental factors that are associated with children's varying levels of skill versus difficulty, giving policy makers clear "sign posts" for multiple avenues for intervention.

3. Research on family, early educational, and clinical interventions offers policy makers a wide array of choices in ways that they may want to invest in young children's emotional development and school readiness. Modest investments in low-cost interventions initially may seem appealing, but the following review suggests that there are few bargains to be had when investing in young children's emotional adjustment. Specifically, some children with serious emotional problems live in extremely vulnerable families, where parents struggle with a host of economic, psychological, and social difficulties. Policies aimed at young children's emotional adjustment and school readiness may need to be cohesive and comprehensive if we expect to have a measurable, positive impact on increasing children's chances for school success. In other words, while short-term and relatively low-cost solutions supporting children's emotional competence are available, they are unlikely to work for children who face the greatest emotional hurdles. While young children's emotional problems are costly, results from some of the interventions reviewed suggest that these problems are identifiable early, are amenable to change, and can be reduced over time.

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The following paper briefly reviews relevant research from developmental, clinical, and educational psychology, evaluating recent empirical evidence on which these assertions are made. First, longitudinal research linking children's social and emotional adjustment to their academic achievement is briefly considered, highlighting ways that emotions matter to children's school success. Second, this paper presents a brief overview of children's emotional adjustment from developmental and clinical frameworks, so that policy makers understand the individual, family and classroom processes that might be targeted in order for policy interventions to be effective. Third, the bulk of this paper then examines a range of interventions in order to address the question of which type of program is most effective in fostering children's emotional adjustment. When is a good time to intervene, for whom, and in what settings? While it would appear to make the most sense to get children "ready" for school by targeting the preschool years, researchers and clinicians have not generally focused on treating emotional problems in children younger than school-age, until relatively recently (Campbell, Shaw, & Gilliom, 2000). Therefore, in this review, programs aimed at increasing children's "school readiness" by improving their emotional adjustment is broadly construed to span two developmental periods—1) when children enter school, in Kindergarten and 1st grade, and 2) prior to school entry.

Children who are disliked by teachers and peers grow to like school less, feeling less love for learning and avoid school more often.

This review is also broadly framed with respect to its scope: It focuses both on universal interventions targeting all children regardless of income and on programs tailored to assist low-income children, given that family- and neighborhood-level economic disadvantage increase children's risk for behavioral and academic difficulty (Bolger, Patterson, Thompson & Kuperschmidt, 1995; Duncan, Yeung, Brooks-Gunn & Smith, 1998). This review examines a "continuum" of service delivery options, considering interventions that target children at low, moderate and high risk with programs of correspondingly low, moderate and high intensity (Webster-Stratton & Taylor, 2001). In order to evaluate the merit of various types of intervention, this review focuses primarily on experimental evaluation research using randomized design; exceptions (where non-experimental evaluation studies are also considered) are clearly noted. Where appropriate, this paper also provides standardized estimates of the size of the impact, or effect for the interventions that are described[1]. (Unfortunately, sufficient data were not available to calculate these estimates in many of the studies reviewed). Finally, the paper concludes with a set of concrete policy recommendations.

I: Children's Emotional Adjustment Predicts Their Early School Success

Over the last twenty years, a series of studies has clearly demonstrated that children's emotional and social skills are linked to their early academic standing (Wentzel & Asher, 1995). Children who have difficulty paying attention, following directions, getting along with others, and controlling negative emotions of anger and distress, do less well in school (Arnold et al., 1999; McLelland, Morrison & Holmes, 2000). More recently, evidence from longitudinal studies suggests that this link may be causal: For many children, academic achievement in their first few years of schooling appears to be built on a firm foundation of children's emotional and social skills (Alexander, Entwistle, & Dauber, 1993; Ladd, Kochendorfer & Coleman, 1997; O'Neil, Welsh, Parke, Wang & Strand, 1997).

Specifically, emerging research on early schooling suggests that the relationships that children build with peers and teachers are a) based on children's ability to regulate emotions in prosocial versus antisocial ways and that b) those relationships then serve as a "source of provisions" that either help or hurt children's chances of doing well, academically, in school (Ladd, Birch & Buhs, 1999, p.1375). Psychologists find that children who act in antisocial ways are less likely to be accepted by classmates and teachers (Kuperschmidt & Coie, 1990; Shores & Wehby, 1999), participate less in classrooms and do more poorly in school than their more emotionally positive, prosocial counterparts, net of the effects of children's pre-existing cognitive skills and family backgrounds (Ladd et al., 1999). One caveat is that children's early academic skills and emotional adjustment may be bidirectionally related, where young children who struggle with early reading and learning difficulties may grow increasingly frustrated and more disruptive (Arnold et al., 1999; Hinshaw, 1992). Clearly our understanding of the causal and reciprocal influences of children's cognitive, language, and emotional competences on later academic achievement would be greatly benefited by additional research. With this caveat in mind, the bulk of longitudinal evidence for the importance of social and emotional adjustment for children's success in early academic contexts is convincing and clear.

How large a difference does children's emotional adjustment make? Children's emotional and behavioral difficulty with peers and teachers is not just a "feel good" issue: Children's aggressive, disruptive behavior has serious, long-term costs, both to the children themselves, and to their communities. Specifically, twenty years of research has now clearly established that aggressive young children who are rejected by their classmates in their first years of schooling

are at grave risk for lower academic achievement, greater likelihood of grade retention (being "held back"), greater likelihood of dropping out of school, and greater risk of delinquency and of committing criminal juvenile offenses in adolescence (Jimerson, Egeland, Sroufe & Carlson, 2000; Kuperschmidt & Coie, 1990; Miller-Johnson et al., 1999; Vitaro, Laroque, Janosz & Tremblay, 2001).

Children with emotional difficulties are likely to "lose out" academically, in a number of ways. First, disruptive children are tough to teach: As early as preschool, teachers provide disruptive children with less positive feedback, so that disruptive children spend less time on task and receive less instruction (Arnold, et al., 1999; McEvoy & Welker, 2000; Shores & Wehby, 1999). Negative and conflictual relationships with one's Kindergarten teacher have been found to forecast children's later academic difficulties through early elementary school (Hamre & Pianta, 2001). Second, emotionally negative, angry children may lose opportunities to learn from their classmates as children gather to work on projects together, help each other with homework, and provide each other with support and encouragement in the classroom (Berndt & Keefe, 1995; Ladd et al., 1999). Third, children who are disliked by teachers and classmates grow to like school less, feeling less love for learning, and avoid school more often, with lower school attendance (Berndt & Keefe, 1995; Birch & Ladd, 1997; Murray & Greenberg, 2000). The costs of being socially rejected or withdrawn with peers and teachers may be particularly great for low-income children, increasing their risk of later school difficulty (Coolahan, Fantuzzo & Mendez, 2000).

Given this compelling evidence that children's emotional adjustment plays an important part in predicting their likelihood of school success, the next question is then: How do we aid children to develop emotional competence and avoid emotional difficulties, so that they come to school ready to learn? Two different approaches to early emotional adjustment are briefly outlined in the next section, so that policy makers can strengthen their understanding of the multiple potential avenues for intervention when targeting children's school readiness.

II: Frameworks for Understanding Young Children's Emotional Competence and Difficulty

Emotional competence: One framework used by many developmental psychologists suggests that children have a set of "emotional competencies" in ways that they think about and handle their own and others' emotions (Saarni, 1990). Children's ability to recognize and label different emotions provides them with powerful social tools: Using words, children can "talk through" rather than act out their feelings of anger, sadness, or frustration (Denham & Burton, 1996). Some children have more difficulty than others in correctly identifying both their own and others' emotions and in thinking of appropriate solutions to common social problems (e.g. resolving conflict with a peer) (Denham, 1998; Garner, Jones, Gaddy & Rennie, 1997). These children persistently misinterpret social situations (perceiving other children's motives as hostile rather than benign), and they then respond aggressively, eventually becoming disliked and rejected by their peers (Dodge & Feldman, 1990).

Children's ability to label and manage different emotions provides them with powerful social tools: Using words, children can "talk through" rather than act out their negative feelings.

In a related avenue of research on children's emotional competence, some investigators focus less on what children know about emotions and more on how children manage or regulate their negative emotions. On the basis of their ability to effectively manage their impulses and feelings, children arrive to formal classrooms with differing "behavioral styles" that have been characterized as more "prosocial" (where children engage in social conversation, cooperative play, and sharing), or "antisocial" in nature (where children hit, argue, and act in oppositional and defiant ways) (Eisenberg & Fabes, 1992; Rubin, Coplan, Fox & Calkins, 1995). Children who have trouble regulating their emotions and behavior may have an especially hard time accurately processing the details of an emotionally upsetting situation, as described earlier (Lemerise & Arsenio, 2000).

Children's emotional styles are thought to be influenced by both children's temperaments and by parents' varying uses of warmth, control, and harshness in the home (Eisenberg & Fabes, 1992; Kopp, 1989; Patterson, Reid & Dishion, 1992; Thompson, 1994; Wakschlag & Hans, 1999). Specifically, children who demonstrate lower emotional competence and more emotional difficulties are more frequently found in families where parents express more negative emotion, engage in more conflict, and are ineffective in helping children deal with their feelings (Cummings & Davies, 1994; Denham, et al., 2000; Eisenberg, Cumberland & Spinrad, 1998; Garner et al., 1997; Gottman, Katz & Hooven, 1996). Correspondingly, children from more emotionally positive and less emotionally explosive households know more about emotions and are more likely to respond in prosocial rather than aggressive ways, in ambiguous situations.

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What does this developmental framework mean for policy? A number of early educational programs have implemented "emotions" based curricula and "social skills training programs" to aid children to appropriately identify, choose, and enact prosocial solutions to typical "social" problems such as dealing with conflicts with friends. A few of these interventions also provide teachers with extensive training in effectively building warm relationships with students, creating more positive and productive classroom climates, managing disruptive behavior, and helping young children to develop greater behavioral self-control. Alternately, some programs target families as the place to intervene, aiding parents in appropriate ways to handle their own and their children's anger and distress. Brief review of whether these programs are successful is included, below.

Young children's emotional and behavioral problems and disorders: A number of investigators in the area of developmental psychopathology focus on "externalizing problem behaviors" among children who have serious and persistent difficulty controlling their feelings of anger and distress. Children with chronic, severe problems acting out in inappropriate, aggressive ways are viewed as having an emotional or behavioral disorder (EBD) (Quinn, Kavale, Mathur, Rutherford & Forness, 1999) and some of these children are at serious risk for antisocial and delinquent behavior in adolescence and early adulthood (Moffit, 1993; Loeber, Keenan & Zhang, 1997: Nagin & Tremblay, 1999).

How do clinical psychologists explain the development of children's severe, chronic and emotional and behavioral problems? Again, psychologists point to parenting practices as one significant (if not sole) influence in children's development of behavior problems, and therefore families' parenting styles are often a major locus of intervention (Denham et al., 2000; also see Selkelitch & Dumas, 1996 and McEvoy & Welker, 2000 for reviews).

Consistently, researchers also identify "family adversity" or "cumulative risk" as a second environmental influence on young children's development of later emotional and behavioral disorder. Evidence for this construct of "cumulative risk" has burgeoned, with recent research indicating that it is the extensiveness of multiple risks (e.g. parents' problems with mental illness, illegal activity, low educational attainment, alcohol and drug abuse, having to rely on public assistance, parenting as a single parent), rather than any single, one of these factors, that best predicts children's emotional and academic status (Ackerman et al., 2000; Campbell, Shaw & Gilliom, 20000; Sameroff, Seifer, Baldwin & Baldwin, 1993; Yoshikawa, 1994). Impulsive, oppositional preschoolers who are exposed to a high number of these accumulated environmental risks are substantially more likely to fall into an "early starter" group of children who continue to struggle with severe behavior problems through middle childhood, rather than "growing out" of their aggressive, acting out behavior (Campbell et al., 2000). Clinical research on the treatment of children's behavioral problems provides a similar portrait of their exposure to cumulative risk. Among one survey of children receiving intensive "integrated" mental health services for behavioral problems, for example, the majority of families struggled with poverty, substance abuse problems and, for ~ of the families, a history of mental illness (Foster et al., 2001).

It is important to note that this research identifies children at greatest risk for bad outcomes: Without wanting to negatively label any child, this research asks us to recognize that some children manifest the early warning signs of a serious behavioral disorder and are deserving of treatment rather than social stigma or rejection. It is also important to remember that only 60% of children who demonstrate elevated levels of disruptive, aggressive behaviors in early childhood will manifest high levels of antisocial and delinquent behavior, later on (Campbell et al., 2000; Nagin & Tremblay, 1999) and that behavioral assessments of children's externalizing problems are subject to considerable measurement error (Bennett, Lipman, Racine & Offord, 1998; Lochman et al., 1995). Therefore, it is doubly important to 1) exercise a great deal of caution in identifying and treating children who manifest behavioral problems and 2) to recognize that the environments that shape children's problematic behavior, such as homes and schools, must be as much the focus of "treatment" (i.e. intervention efforts) as are children (McEvoy & Welker, 2000). With these caveats in mind, it is equally important to recognize the value of identifying and treating children who most need clinical services, as one of many ways to support young children's school readiness.

III: Avenues of Intervention— Programs That Support Children's Emotional Competence and Ameliorate Their Emotional Problems

Can the trajectories of children who are headed for emotional and behavioral trouble be deflected, so that they are redirected onto a more positive course of school success rather than school failure? Can the number of children who are "school ready" in any given school or district be increased, by helping families and teachers to support children's development of emotional understanding and prosocial behavioral styles? There are a wealth of interventions that have been implemented at the family, child care, school, and clinical site levels to address these questions. This paper cannot review all the relevant evaluations of each of these areas of intervention, comprehensively. Instead, broad conclusions will be drawn from different areas of research, relying on relevant meta-analyses, literature reviews, and specific studies, where

Emotion Knowledge and Emotion Utilization Facilitate School Readiness

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Although largely ignored for a long time, we have known for decades that children's emotion knowledge (EK) contributes to their ability to regulate their emotions and behavior. We have also known for a long time that emotion and self-regulation correlates with various measures of social and academic competence. Emotion knowledge (EK) in older children and adults has many facets. EK in young children has fewer aspects, but these include the capacity for emotion perception and emotion labeling, the two facets that constitute the fundamental infrastructure of EK. Without these two parts of the foundation, scaffolding of the more complex aspects of EK cannot occur. For example, empathy (a vicarious emotional experience) is impossible if the observer cannot detect the emotion signals of the other person. Moreover, if the observer accurately detects the emotion signal, she or he will still need to label it (symbolize it in awareness) to facilitate social communication and make an optimally empathic response. Thus poor skills in emotion perception and labeling greatly diminish the capacity for empathy, the prosocial behavior it can motivate, and its inhibitory effects on aggression. EK in the present context refers mainly to emotion perception and emotion labeling.

Recently we have learned something about the antecedents or causal processes in the development of emotion knowledge (EK) and the causal processes that flow from EK to social skills, academic competence, and peer acceptance–a critical factor in social functioning and success in school. Emotion expression and discourse about emotion feelings in the home, parental use of emotion coaching, and the child factors of emotionality/temperament and verbal ability contribute to the development of EK. Children with low thresholds for negative emotions and poor skills for regulating them will influence the social environment in a way that tends to restrict opportunities to increase understanding of emotions. Such children may require emotion-centered preventive intervention to realize good progress on the key preschool developmental task of making connections among emotion feelings, appropriate thoughts, and effective behavioral strategies.

The child factor of verbal ability also contributes very substantially to the development of EK. Correlations between either receptive or expressive vocabulary and EK range from about .30 to .60 across a number of studies. Thus conditions that contribute to delayed development of verbal ability also contribute to delays in the development of EK.

More recent studies have shown that EK contributes to the prediction of social and academic competence even after controlling for the effects of verbal ability and emotionality/temperament. In addition to the direct effects of EK on behavioral and academic outcomes, it also plays the role of mediator. In a longitudinal study of Head Start children, emotion knowledge in preschool mediated the effect of verbal ability on academic competence in third grade. Path analysis of data from a study of first and second grade children in a rural/small town district revealed that verbal ability predicted EK, EK predicted social skills, and social skills, in turn, mediated the effect of EK on peer acceptance. Thus, knowing about emotions, and even having the right emotion feeling, are not enough. Socioemotional competence depends on emotion utilization, the use of skills motivated by the emotion. The classic example is empathy, where prosocial behavior occurs only when the motivation of modulated vicarious emotion experience drives relevant helping behavior. Empathy without prosocial action has limited value. Social and academic competence require emotion modulation and the skills to utilize the adaptive motivation inherent in modulated emotion. (For references, email <izard@udel.edu>.

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appropriate. The overview provided below is organized by age range of the children served and by levels of programmatic intensity.

Intervening When Children Enter School

A wide range of interventions identifies children's entry into formal schooling as a prime opportunity to affect children's social, emotional, and academic competence. While many of these programs recognize that children's emotional development is grounded in their earlier experiences in infancy and toddlerhood, their primary focus is in targeting children in Kindergarten or 1st grade.

Low-intensity interventions in the classroom: Largely based on the model of emotional competence outlined above, some programs have been implemented to change the way that children think about emotions and social situations. Using modeling, role play, and group discussion, teachers can devote relatively small amounts of class time to instruct children on how to identify and label feelings, how to appropriately communicate with others about emotions (e.g. to use words instead of fists), and how to resolve disputes with peers. Often, these curricula are taught for about 2 hours a week, for between 12 and 20 weeks, and they are available as commercially distributed packages (Conduct Problems Prevention Research Group, 1999b; Frey et al., 2000; Greenberg, Domitrovitch, & Bumbarger, 1999; Quinn et al., 1999). The potential gain is that such programs can be offered "universally" to all children in a given classroom, for relatively low cost. As a result, the climate of the classroom may become significantly less chaotic and more conducive to learning (Conduct Problems Prevention Research Group, 1999b). The potential drawback is that these programs may yield only a modest, short-term impact on children's social and emotional behavior (with effect sizes less than .3) (Quinn et al., 1999).

Classroom-based programs have been more effective when they have targeted both children's knowledge of emotions and children's emotional and behavioral self-control through classroom based "games" that reward discipline and cooperation. Some of these programs place substantially greater investment in improving classroom climates through teacher training (in one intervention, this included as much as 60 hours of training) and appear to yield stronger positive effects (Ialongo, Poduska, Werthamer & Kellam, 2001). In that intervention, for example, children who were randomly assigned to the program in 1st grade were significantly less likely to be diagnosed with conduct disorder, significantly less likely to have been suspended from school, and significantly less likely to need mental health services, 5 years later, than were children assigned to a control group (with effect sizes equal to .4, Ialongo et al., 2001). While these findings support the value of classroom-based approaches, children's emotional adjustment and school success may also be maximized by coordinating classroom intervention with parent-based approaches (Ialongo et al., 2001).

Classroom-based programs have been more effective when they have targeted both children's knowledge of emotions and children's emotional and behavioral self-control.

Low- to moderate-intensity interventions in the home — Parent training programs: From the developmental and clinical frameworks outlined above, it is clear that many psychologists view parenting as playing a key role in children's emotional adjustment. Based on this body of research, a number of interventions have been designed to reduce children's risk for emotional difficulties by aiding parents to increase their positive interactions with their children, to set firm limits on children's negative behaviors, and to reduce their use of harsh parenting practices when the adults, themselves, become angry or upset (McEvoy & Welker, 2000; Kazdin, 1987; Serketich & Dumas, 1996; Webster-Stratton, 1998).

These programs vary in their approach, their intensity, and the locations in which they are implemented (e.g. home visiting programs, telephone support, parenting skills workshops offered by health care providers, parent educators, social work staff). Generally, these programs have shown moderate success (Kazdin, 1987). One concern is that the link between harsh parenting and children's manifestation of behavior problems has been found to hold true for white families but not African American families in some studies, suggesting that interventions must be placed in culturally-grounded frameworks that take community norms, values, and attitudes towards parenting into account (Deater-Deckard & Dodge, 1997; Spieker et al., 1999). A second, significant concern is that the effects of these programs may be more transitory than long-lasting (Corcoran, 2000).

"Multi-pronged" home/school interventions for children at moderate risk: More intensive interventions have also been designed for children who exceed some criterion level of disruptiveness in their first few years of formal schooling. Because the goals of these programs are to help children most prone to externalizing problems, they are termed "targeted" or "indicated" preventive interventions, and they address children's emotional and behavioral difficulties on both home and school fronts. While these programs are more costly to run and are targeted at fewer children, they are expected to pay off in the long run, by reducing the prevalence of costly outcomes such as criminal offenses and drop-out from school among a

smaller group of high risk children (Eddy, Reid & Fetrow, 2000; Kazdin, 1997; McEvoy & Welker, 2000; Conduct Problems Prevention Research Group, 1992; Ialongo et al., 2001).

For example, in one recent intervention, children who were identified as disruptive were given classroom-based social skills training, and their parents were trained to encourage children's positive behaviors, to use "time-outs" for negative behaviors, to supervise children's after-school activities, and to problem-solve in times of family crisis (Tremblay et al., 1995; Vitaro et al., 1999). In some programs, teachers are also provided with additional training, and parent-teacher partnerships are strengthened by regular conferences and phone contact (Ialongo et al., 2001; Reid et al., in press). Recently, a large-scale, multi-site program for young children, called FAST-TRACK, has been implemented, where all children in a given classroom receive 22 weeks of social and emotional skills curricula, regardless of their relative emotional or behavioral risk (Conduct Problems Prevention Research Group, 1999a). In addition, 10% of the enrolled kindergartners who exhibited a high number of behavior problems both at home and school were included, with their parents, in parent training, peer group training, and academic tutoring. Some programs such as "Let's Invest in Families Together" (LIFT) take the prevention program into additional settings, such as the playground, where children may be teased or bullied (Eddy et al., 2000).

More intensive interventions (that include both parent- and teacher-training) demonstrate remarkable effectiveness in reducing children's emotional and behavioral problems.

Results from a number of experimental studies (using randomized designs) suggest remarkable effectiveness of these multipronged programs on reducing children's disruptive behavior. These gains range from modest improvements in children's social, emotional, and academic skills after 1 year in the FAST-TRACK program, to effect sizes of as high as 1.5 reported by Eddy, et al.'s (2000) LIFT program (Stoolmiller, Eddy & Reid, 2000). These interventions demonstrate clearly that multi-pronged programs translate to significant improvements by reducing children's behavioral problems and their use of special services, and by increasing children's social skills and their reading readiness (Conduct Problems Prevention Research Group, 1999a; Ialongo et al., 2001). These multi-pronged programs have also shown more effectiveness in reducing the likelihood that children will engage in delinquent behaviors, such as drug and alcohol use (Stoolmiller et al., 2000), and in being held back a grade or more, than did the less expensive, lower-intensity, classroom-only interventions described earlier (Vitaro et al., 1999).

Some researchers have pointed out that these findings are not sustained over longer periods of time, and that children's high school drop-out rates are not significantly affected by the intervention program. This has led investigators to suggest that "one-shot" interventions in early childhood may not be sufficient, and that children may need "booster" levels of intervention support in high school in order to improve chances of later school success. Others have suggested that children with marked behavioral and emotional disorder need more comprehensive, intensive services offered in a clinical setting.

High-intensity clinical interventions for high-risk children: It is important to note that the majority of children in poverty are doing well, emotionally, and should not be stigmatized or viewed from a deficit-oriented perspective (Garcia Coll, Meyer & Brillon, 1995; Garner & Spears, 2000). However, a small percentage of young children in poverty struggle with serious emotional and behavioral disturbance, and these children deserve access to the same level of intensive clinical intervention services that their more affluent counterparts are likely to purchase through private insurers. Specifically, there exist a range of programs designed to lower the risk of young children's development of serious emotional and behavioral problems in families struggling with multiple, chronic stressors such as high risk of maltreatment, mental illness, substance abuse, and domestic violence. School-based mental health consultation programs, for example, pair psychologists, social workers and psychiatrists with local school districts in order to identify, assess and treat young children who are in serious emotional and behavioral trouble. Clinicians from local community mental health organizations observe classrooms, provide teachers with training in early childhood mental health and development, and provide child- and family-centered psychotherapy to families in need (Cohen & Kaufmann, 2000). As of this writing, no evaluations of school-based consultation programs using randomized trial design could be found. However, the potential for such programs seems promising.

Because harsh, coercive parenting has been identified as a likely predictor of young children's behavior problems, and because juvenile delinquency has consistently been identified as a likely consequence of these same problems, there is considerable overlap between home-based intensive clinical interventions designed to assist multiply stressed families at risk for maltreatment and multi-modal programs designed to reduce the likelihood of juvenile offending among

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youth. Of these programs, multisystemic approaches appear to be the most rigorously evaluated and the most successful, with older children. Specifically, these programs offer families comprehensive services from clinically-trained caseworkers that work intensively with a small number of families in home, school and community settings (for review of results, see Henggeler, 1999). This approach has strong potential for success with families with young children, given its track record with older children using stringent standards of randomized-trial evaluation (Campbell et al., 2000).

Intervening Prior to School Entry

One developmental axiom is that intervention early in the course of development is more cost-effective than later treatment for children and their families (see Alexander & Entwistle, 1988; Jimerson et al., 2000). Accordingly, there are a wealth of programs designed for families with infants, aimed at reducing risks and supporting positive outcomes among families facing significant poverty-related risks. One problem in considering these programs is that few of these have specifically focused on children's emotional adjustment as a targeted outcome, and so have not extensively assessed their effectiveness in this regard. Instead, programs have hoped to improve low-income children's academic and cognitive performance, indirectly, by working with families (Brooks-Gunn, Berlin & Fuligni, 2000; Yoshikawa, 1994). These programs are briefly reviewed, below, in "broad-brush" fashion.

Home visiting programs for parents of infants and young children: Because many of children's emotional problems appear to be so profoundly affected by parenting practices, many intervention programs aimed at helping adults parent more effectively may also indirectly improve children's emotional and behavioral outcomes. Specifically, many of these programs aim to improve families' provision of sensitive, responsive care, and to curtail families' use of inconsistent and harsh parenting as an indirect means of improving children's later life chances (see Brooks-Gunn et al., 2000; Corcoran, 2000; Gomby, Culross & Behrman, 1999 for reviews). Home visiting demonstration projects have been implemented in a wide array of rural and urban settings and vary broadly in the types of services they offer, from teaching parents about appropriate developmental milestones, early learning, and effective parenting, to public health and social welfare foci oriented towards improving maternal mental health, economic self-sufficiency, and social support (Brooks-Gunn et al., 2000; Gomby et al., 1999; Olds et al., 1998).

Exhaustive review of the efficacy of these programs is too great a task to be tackled here (Brooks-Gunn et al., 2000; Olds & Kitzman, 1990; 1993). Conclusions that can be drawn from smaller experimental and quasi-experimental studies is that some demonstration home visiting programs have generally shown small gains in improving parents' provision of sensitive, nurturing care and in reducing parents' negative, coercive behaviors (with effect sizes rarely exceeding .2). However, when these programs have been taken to scale, and larger evaluations using randomized design have been conducted, results have been considerably less encouraging (See Gomby et al., 1999; Goodson, Layzer, St. Pierre, Bernstein & Lopez, 2000). Surprisingly, few studies have examined whether the program has been effective in indirectly supporting children's emotional development (Brooks-Gunn et al., 2000; Yoshikawa, 1994).

Moderate-intensity interventions in child care and early educational settings: Given that 61% of children ages 3-5 spend a significant portion of their day with child care providers other than their parents, it is particularly important to focus on child care's effects on young children's emotional development and school readiness (Arnold et al., 1999). Child care providers identify preschoolers' disruptiveness as a serious problem in their classrooms, and children might learn greater emotional and behavioral self-control in smaller classes with increased teacher training and support (Arnold et al., 1999; Denham & Burton, 1996; Gross et al., 1999; Hamre & Painta, 2000). Yet few experimental studies have been carried out that focus on improving child care quality and caregivers' classroom management practices as avenues for decreasing children's emotional and behavioral difficulties (Webster-Stratton, 1999). It is clear that considerable additional research is needed to examine the question of whether and how child care quality may affect young children's emotional development and school readiness (Arnold et al., 1997; Hagekull & Bohlin, 1995).

Among early educational settings, Head Start stands out for its historical commitment to supporting young children's social and emotional development (Zigler & Styfco, 1995). Findings regarding the impact of early educational settings such as Head Start and state-funded preschool programs on young children's emotional development, however, are mixed. On one hand, results from longitudinal studies of intervention programs such as the Chicago Child-Parent Centers and High Scope/Perry Preschool suggest that this form of intervention is well worth the investment, leading to extremely long-term social and academic gains for enrolled children (Barnett, 1995). On the other hand, few evaluations of early educational interventions have utilized a randomized design, leading to skepticism regarding the validity of claims of programmatic success.

Specifically, nonrandomized studies cannot rule out the possibility that families with differing levels of skills, attitudes, and competencies choose whether or not to enroll their children in early interventions. If families with comparatively more skill and competence are more likely to enroll their children in early interventions, some investigators point out that children's successes that should be attributed to family

School Readiness and Regulatory Processes

Claire B. Kopp

Raver challenges us to understand more fully the causes of inadequate social and emotional readiness for school. A useful starting point involves distinguishing three crucial regulatory processes—physiological, emotional, self-regulation—from each other. Thinking about the distinctiveness of each process including developmental origins and associated risk factors should lead to greater understanding of children's dys-regulation and intervention needs. This decoupling approach does not negate the reality that school readiness entails a seamless melding of all three processes.

Physiological regulation (PR) typically begins in the early weeks of life with gradually emerging control of bio-physiological systems (e.g., digestion, arousal, sleep). Over time PR transitions into a bio-behavioral process in which arousal control is intrinsic to infant attention, social-interactions, and learning. Optimally, arousal control reflects a day and night cycle with daytime periods of observant attentiveness alternating with quiet alertness, and nighttimes containing restful sleep. Physiological dys-regulation is apparent in the newborn period, particularly among babies exposed to prenatal/perinatal risks. However, even healthy babies show non-optimal PR due to chaotic rearing contexts and inadequate parenting. The result: children who continue to have disturbed sleep, heightened irritability, and erratic alertness, and subsequent compromised attention, learning, emotion competencies, and social experiences. A new challenge (e.g., school entry) typically overwhelms these children because of their fragile bio-behavioral regulatory systems.

In contrast to the more generalized aspect of PR, emotion-regulation (ER) refers to modulating the intensity of emotion responses such as anger, fear, pleasure, sadness, and other emotions. Effective ER means a response is appropriate to context, enhances rather than jeopardizes bio-behavioral well-being, and guides subsequent social and cognitive activities. ER begins during the 1st and 2nd years of life, and depends on appropriate caregiver inputs (e.g., soothing, facilitation of infant attention to potential soothers, descriptions of feelings) such that babies and toddlers *intentionally* reduce fretfulness by exploring interesting sights, engaging in play, gesturing to parents for assistance, finding self-soothers (e.g., blanket), and talking about their distress. During the 2nd and 3rd years, the growth of ER is also a function of children's understanding of their own and others' emotion states, and their ability to reason about emotions. Risk factors include inadequate parenting, children with heightened reactivity to stimuli, and language skills inadequate for handling interpersonal disputes.

In contrast to PR and ER, self-regulation (SR) is fundamentally a balancing of self defined needs with respect to societal/cultural values and norms. For young children, SR involves the ability to comply with everyday family norms, including delaying behaviors as appropriate. Parents typically begin socializing toddlers to norms by the second year. Because toddlers do not readily accept limitations, the growth toward effective SR requires perceptive parenting *and* an emotional bond between parent and child. In turn, children must be attentive to parents' messages and understand their own role in SR. In addition to the parent and child risk factors noted above, another important one concerns limited parental inputs about everyday rules.

This sidebar has highlighted the unique features of regulatory processes, and noted their parallel developmental trajectories. It should be apparent that integration of the processes leads to competent school readiness.

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competencies are misinterpreted as resulting from the intervention (Mayer, 1997). One recent meta-analysis of State-funded preschools emphasizes that the lack of rigorous evaluation design seriously hampers any interpretation that can be made of the few, modest gains (with most effect sizes of approximately .2) regarding participants' school readiness (Gilliam & Zigler, 2001). A national randomized trial evaluation of Head Start is planned in the next few years, and such results will likely provide a clearer index of the ways that Head Start may make a difference for young children's emotional development and school readiness.

Moderate- to high-intensity home/classroom interventions: Many interventions designed for families facing high risk combine both of the components described above, offering families home visits in infancy followed by enrollment in "enriching" early educational programs in toddlerhood (Brooks-Gunn et al., 2000; Yoshikawa, 1995). Results of randomized-trial evaluations of these demonstration programs (such as BEEP, CARE, IHDP), suggest positive effects on parenting, with mixed results regarding their effects on young children's emotional development (Brooks-Gunn et al., 2000). Early findings from randomized-trial research with a nationally implemented program of 0-3 family support for early school readiness (Early Head Start) are promising. Specifically, families in the Early Head Start program demonstrated more supportive parenting, with children demonstrating lower levels of aggression and greater emotional self-regulation, than did families in the control group, with modest effects (of approximately .1 to .2) in more established programs that had been implemented in both homes and centers.

Recent research suggests that early educational settings may offer a valuable opportunity to implement multi-pronged, comprehensive teacher- and parent-training programs that specifically target children's emotional and behavioral adjustment. One program, titled "The Incredible Years," offers comprehensive training to Head Start parents, teachers, and children, over 12 weeks (Webster-Stratton, 1998). This intervention has led to significant improvements in teachers' use of more positive, less harsh classroom management practices, improved classroom climate, and less disruptive behavior on the part of children (with effect sizes averaging .6, Webster-Stratton, Reid & Hammond, 2001). Importantly, the intervention also yielded improvements in skills important to children's school readiness, such as their greater engagement and more self-reliance in the classroom (Webster-Stratton et al., 2001). Similar to the school-aged, multi-pronged interventions reviewed earlier, this set of intervention studies demonstrates that substantial gains can be made in improving young children's emotional and behavioral adjustment when both home and school fronts are targeted.

High-intensity interventions aimed at improving infant and preschool mental health: A small number of clinically-oriented programs can be identified that offer comprehensive mental health services to both mothers and their infants or young children. Families enrolled in these services have largely been identified as needing services because of social service providers' concerns with economic self-sufficiency (Knitzer, Cauthen & Kisker, 1999), maternal psychopathology (e.g. maternal depression, Dickstein et al., 1998), maternal substance abuse (Lester, Boukydis & Twomey, 2000), or child health and mental health problems diagnosed early (e.g., low birth weight, neurological impairment, early-onset conduct problems or developmental delay). Interestingly, these programs emphasize the therapeutic benefit of repairing "breakdowns" in dyadic relationships for both parents and children, aiding the parent-child "system" to get back on an optimal track. Few large-scale, randomized trial evaluations of these programs have been conducted, and fewer still include long-term emotional or school readiness outcomes among participating children. It stands to reason that families facing a large number of grave psychosocial stressors may need this level of intensive, clinical support in order to avoid long-term, costly emotional and behavioral problems.

Similarly, there have been a number of recent calls to improve screening and treatment efforts for toddlers and preschool-aged children with serious emotional and behavioral problems (Arnold et al., 1999; Briggs-Cowan, Carter & Skuban, & Horwitz, 2001; Fantuzzo et al., 1999; Gross et al., 1999; Yoshikawa & Knitzer, 1997). For example, teachers have significant concerns for some of their students' overactivity, inattentiveness, and disruptiveness, with Head Start teachers reporting that 10% of their students exhibit high levels of antisocial, aggressive behavior (Kuperschmidt, Bryant & Willoughby, 2000). Despite these concerns, Head Start teachers face multiple barriers in referring children for emotional and behavioral difficulties (Fantuzzo et al., 1999). Head Start teachers have few opportunities for classroom-level mental health consultation and support, and, despite a national Head Start Performance Standard mandate to serve children with emotional and behavioral disorders, participating children rarely receive special services for these difficulties (Fantuzzo et al., 1999).

Preschool and child care settings offer a valuable opportunity to implement comprehensive, multi-pronged interventions that support young children's emotional and behavioral adjustment.

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There is some sparse evidence that, despite these barriers, Head Start might be an excellent site for service provision to young children at high risk for later behavioral difficulty (see Fantuzzo et al., 1996; Lara, McCabe & Brooks-Gunn, 2000). For example, in additional randomized studies of the "Incredible Years" intervention (described earlier), almost all (90%) of the Head Start children with conduct problems who were in the "treated" group showed a "clinically significant" (e.g. a 30% or greater) reduction in their acting out, aggressive, and oppositional behavior, as compared to improvements in behavior for only 27% of the control group children (effect sizes immediately post-treatment were in the .5 range) (Webster-Stratton & Hammond, 1997). Unfortunately, this kind of intervention stands as an exception rather than the rule in the early childhood clinical literature: Few other clinically-oriented, multi-modal, and rigorously-evaluated interventions, designed and implemented for high-risk, low-income preschoolers, could be found for this review (see Arnold et al., 1999; Fantuzzo et al., 1996). While recent Federal initiatives and literature reviews on Head Start children's mental health have signaled increased interest in this area (see Webster-Stratton & Taylor, 2001; Yoshikawa & Knitzer, 1997), there is clearly still much to be learned regarding the prevalence and treatment of behavior problems among Head-Start eligible preschoolers, and regarding the long-term social and academic benefits of providing treatment in the preschool years.

IV: Summing up — Cautions and Recommendations

Cautions: One question that arises from this review is: How we can explain the widely varying levels of effectiveness that have been demonstrated across these different types of interventions? Three cautions are offered in an effort to explain variation in past programmatic success and to frame our expectations for the success of future interventions.

First, programmatic success is clearly reliant, in great measure, on the extent to which families participate in the programs designed to serve them (Brooks-Gunn et al., 2000). In many studies, across a wide diversity of types of intervention, rates of attrition in programs are alarmingly high and program participation rates are worrisomely low (Corcoran, 2000; Gomby et al., 2001; Kazdin, Mazurick & Bass, 1993; Korfmacher, Kitzman & Olds, 1998; Yoshikawa, Rosman & Hsueh, 2001). Many investigators have suggested that the quality of partnership or "therapeutic alliance" between the practitioner/educator/clinician and the family need improvement (Corcoran, 2000; Brooks-Gunn et al., 2000; Orrell-Valente et al., 1999). In addition, it may be that programs are not sufficiently comprehensive in addressing both parental and child mental health problems. Specifically, as this review suggests, some children at high risk for emotional and academic difficulty live in vulnerable families facing multiple ecological stressors that make participation in programs very difficult (Liaw, Meisels & Brooks-Gunn, 1995). Some children who are acting out, in school, face not one, but many problems at home, and those problems are likely to be serious, long-term and requiring of significant attention by professionals in the legal, psychological and social work communities, rather than simply through a short-term parenting curriculum, for example (St. Pierre & Layzer, 1998). In sum, it is clear from the cumulative risk literature that families who may need intervention services most, may be least able to participate in interventions unless these programs address at least some of these stressors, directly.

Second, it may be unreasonable to expect long-term emotional and behavioral gains on the part of young children, if their families continue to face chronic, structural stressors that erode children's psychosocial health. It is inappropriate to expect that a short-term program lasting a year or less will "inoculate" a child from the debilitating consequences of a chronic, recurring set of material hardships such as deep poverty, inadequate housing, and violent surroundings. As many leaders in the field of poverty research have noted (Chase-Lansdale & Brooks-Gunn, 1998; Huston et al., 2001; Yoshikawa, 1999) this is certainly one of the driving tenets behind Welfare Reform efforts: to raise families out of poverty rather than simply aiding poor families cope with the material hardships that they face. This means a) that policy makers and the public may need to lower their expectations of psychosocially-oriented interventions, if they are not paired with interventions aimed at families' economic security at the structural level and b) that structural interventions, such as improvements in family income, neighborhood safety and residential stability may have important and significant effects on children's emotional and behavioral well-being, that are well worth tracking (see for example, Duncan & Brooks-Gunn, 2000; Katz, Kling & Liebman, in press; Knitzer, Yoshikawa, Cauthen & Aber, 2000; Morris, 2002). For example, programs such as Moving to Opportunity (conducted by the U.S. Department of Housing and Urban Development (HUD)) suggest that providing low-income families with housing in a safer, more affluent neighborhood significantly reduces low-income boys' behavior problems (demonstrating an effect size of .5 when compared to their control group counterparts) (Katz et al., in press). While neighborhood and family poverty extend beyond the scope of this paper, it is important to highlight the critical need for continued research on the impact of structural and economic interventions (such as Welfare Reform efforts) on young children's emotional health and school readiness.

Third, we must recognize that the economic, employment, and policy contexts in which high-risk families have changed substantially from the conditions under which many models of interventions were originally designed and implemented,

now over 20 years ago (e.g. Olds et al., 1999). Home visiting and family involvement components of many programs may be particularly challenging to implement when increasing numbers of low-income mothers face strong policy mandates to enter and stay in the workforce. Unless welfare reform policies are substantively amended to allow parent participation in early childhood interventions to "count" as employment, it is likely that stressed, economically insecure families may have to place participation in home visiting prevention/intervention efforts as a lower priority than participation in work and work-related activities (Gyamfi, Brooks-Gunn & Jackson, 2001; Lamb-Parker, Piotroski, Baker, Kessler-Sklar, Clark & Peay, 2001). State and local family support, early education, and welfare-to-work policy professionals need to insure that programs are coordinated, rather than working at cross-purposes, when taking families' time and attention.

Recommendations:

The first set of recommendations following from this review is that educational policy makers at the Federal, state and local levels should capitalize on public support for young children's school readiness by making a range of investments in their emotional adjustment as well as their academic skills. In service of this goal, it is key that policy makers, researchers, and the public recognize that children's emotional and behavioral difficulties are amenable to change. Specifically, results from a wide range of randomized, rigorous interventions demonstrate that children's emotional development is plastic and open to environmental influence. Multi-pronged intervention efforts that are implemented on home and school fronts significantly deflect children's negative behavioral trajectories and significantly improve their chances for later school success. Early childhood and educational policy professionals are specifically urged to consider the following options as ways to strengthen children's school readiness:

Improvements in family income, neighborhood safety, and residential stability may have important and significant effects on children's emotional and behavioral well-being.

- Target children prior to school entry, in diverse settings such as Head Start, child care settings, as well as in the first few years of school.

These settings are often already supportive of the importance of early social and emotional health, and have already made substantial programmatic commitments to this area of young children's development. These commitments should be strengthened with additional funding and support.

- Broaden early elementary educational mandates for school readiness to include children's emotional and behavioral adjustment as key programmatic goals.

In our haste to increase children's pre-literacy skills, for example, it is essential that we do not lose sight of the contributions that children's emotional and behavioral adjustment makes to their chances for academic success.

- Consistently assess young children's emotional adjustment, using psychometrically valid measures of both their emotional and behavioral competence and difficulty, in child care and early educational settings as well as during their transition through the first few years of elementary school.

It is clear from this review that much remains to be learned regarding the role of children's emotional adjustment in predicting their likelihood of later academic success. Tracking children's emotional adjustment along with children's early academic progress will aid both researchers and policy professionals in answering key questions regarding the impact of improvements versus decrements in children's emotional adjustment on their ability to do well, academically, over time.

- Support young children with interventions that span a range of programmatic intensity.

Low-cost, universal interventions may provide tangible benefits by making preschool and early elementary classrooms more positive and less chaotic learning environments. However, review of the literature suggests that these benefits are best realized when children who are at gravest risk for negative emotional and academic problems are also provided with more intensive services, implemented in both home and classroom contexts. A number of the innovative interventions reviewed earlier have successfully found ways to offer much-needed services to these children without stigmatizing them or losing the support of important stakeholders such as parents and teachers. Therefore, leaders are strongly encouraged to support the provision of both low-intensity, universal programs and higher-intensity supports for the families who have been identified as needing these services most. These models deserve broader implementation, with carefully designed evaluations that test whether there are significant emotional, behavioral, and academic gains for both the intervention participants and for the classrooms in which these children are enrolled.

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- Pay close attention to issues of quality assurance and attrition when investing in young children's emotional adjustment and school adjustment by implementing innovative interventions.

It is key that researchers, evaluators, and practitioners maximize programs' chances of success by making sure that the most stressed families who may show the most substantial gains are identified, enrolled and complete the program. The quality of services that are offered must remain consistent and well-documented across the "life" of the program's implementation if both intervention successes and difficulties are to be clearly and carefully understood.

- A small proportion of young children will need integrated, comprehensive services available to multiple members of their families in order for gains in children's school readiness to be realized.

Multiple agencies serving young children must be provided with the support needed to work collaboratively. Teachers in Head Start, pre-Kindergarten, Kindergarten, and elementary classrooms deserve professional support by being given training and better access to clinical service referral for young children and their families. This level of clinical consultation and support will help teachers focus more effectively on the job of teaching, while also helping young children who manifest clinically elevated levels of emotional and behavioral difficulty get the services that they need (Fantuzzo et al, 2001). While models of "systems of care" have begun to be built among juvenile justice, child welfare, public health and mental health systems of service delivery for older children (Holder, Friedman, & Santiago, 2001), these services are sorely needed for younger children (Yoshikawa & Knitzer, 1997).

A second set of recommendations can be directed to intervention-oriented funders, policy makers, and investigators in other areas of child welfare, family support, and economic self-sufficiency, as well as in education. Specifically, researchers and policy professionals in these other areas are urged to consider improvements in young children's emotional development as worthy targets of intervention and as key benchmarks of programmatic success. The second major conclusion that can be drawn from research reviewed earlier is that we have considerably more to learn about the course of young children's emotional development, particularly in the context of large-scale interventions of all kinds. In the past, investigators have been reticent to include measures of children's emotional development, arguing that there were few robust, reliable and valid measures, and that many were difficult to use (for review, see Raver & Zigler, 1997). That has since changed: a wide range of excellent assessment tools is now available with which to assess young children's emotional and behavioral skills (Fantuzzo, Manz & McDermott, 1998; Fantuzzo, Coolahan, Mendez, McDermott, & Sutton-Smith, 1998; Raver & Zigler, 1997).

A third set of recommendations is also clear and is addressed to both policy audiences: Without economic security, many families and children will be hard pressed to be emotionally healthy, well-regulated and ready for school. We must make sure that Welfare Reform and school readiness objectives and programs work together, rather than at odds with one another. One major concern with Welfare Reform efforts in the late 1990's was that low-income mothers' entry into the workforce would be paralleled by increases in mothers' levels of stress, use of detrimental parenting strategies, and corresponding decrements in children's emotional well-being. It appears from recent review of results across multiple demonstration projects that employment mandates, paired with incentives, have not had the deleterious effects on young children's emotional well-being that some had feared (Huston et al, 2001; Morris, et al., 2000; Yoshikawa, 1999). Just as school readiness programs need to be mindful of Welfare Reform demands that families face, so too can Welfare Reform efforts benefit from substantive attention to parental and child psychological and emotional health.

Notes

[1] Estimates of effect size provide a standardized way to evaluate the magnitude of the impact of a particular intervention on a given child outcome. While omnibus tests of significance (e.g. F or t statistics and their p values) inform the reader of a significant difference between control and intervention groups on a given outcome, effect size estimates inform the reader about how large or small that difference is. For example, consider a hypothetical classroom intervention designed to increase children's ability to work prosocially with peers: An effect size of .1 would, in most cases, be considered modest, in that a treatment with a .1 effect size would be associated with an increase of 1/10 of a standard deviation in their ability to work with their peers. In contrast, an effect size of .5 would suggest that the treatment is associated with an improvement of a full " of a standard deviation in children's ability to work with their peers. For a more comprehensive discussion of ways to calculate effect size estimates, the practical importance of findings based on considerations of effect size, and different ways of interpreting the meaning of small and large effects, see McCartney & Rosenthal, 2000.

Acknowledgements

Support for this research was provided by the National Center for Children in Poverty, Mailman School of Public Health, Columbia University, the McCormick-Tribune Foundation, and a Faculty Scholars Award from the William T. Grant Foundation. Many thanks to J. Lawrence Aber, David H. Arnold, Greg J. Duncan, Pamela Garner, Elizabeth Gershoff, Jacqueline D. Goldsby, Jane Knitzer, Ross Thompson, and Hirokazu Yoshikawa for their invaluable comments on previous drafts.

References

Aber, J. L., Jones, S. & Cohen, J. (2000). The impact of poverty on the mental health and development of very young children. In C. H. Zeanah (Ed), Handbook of Infant Mental Health, 2nd Edition. New York: Guilford Press, pp. 113-128.

Ackerman, B. P., Izard, C. E., Schoff, K., Youngstrom, E. A., and Kogos, J. (2000). Contextual risk, caregiver emotionality, and the problem behaviors of 6- and 7-year-old children from economically disadvantaged families. Child Development, 70, 236-248.

Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (1993). First grade classroom behavior: Its short and long-term consequences for school performance. Child Development, 64, 801-814.

Arnold, D. H., Ortiz, C., Curry, J. C., Stowe, R. M., Goldstein, N. E., Fisher, P. H., Zeljoja A., & Yershova, K. (1999). Promoting academic success and preventing disruptive behavior disorders through community partnership. Journal of Community Psychology, 5, 589-598.

Arnold, D. H., McWilliams, L. & Arnold, E. H. (1998). Teacher discipline and child misbehavior in day care: Untangling causality with correlational data. Developmental Psychology, 34, 276-287.

Barnett, W. S. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. Future of Children, 5, 25-50.

Bennett, K. J., Lipman, E. L., Racine, Y. & Offord, D. R. (1998). Annotation: Do measures of externalizing behaviors in normal populations predict later outcome?: Implications for targeted interventions to prevent conduct disorder. Journal of Child Psychology and Psychiatry, 39, 1059-1070.

Berndt, T. J. & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. Child Development, 66, 1312-1329.

Birch, S. H. & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. Journal of School Psychology, 35, 61-79.

Briggs-Cowan, M. J., Carter, A. S., Skuban, E. M., Horwitz, S. M. (2001). Prevalence of social-emotional and behavioral problems in acommunity sample of 1- and 2-year-old children. Journal of American Academy of Child and Adolescent Psychiatry, 40, 811-819.

Bolger, K. E., Patterson, C. J., Thompson, W. W., & Kuperschmidt, J. B. (1995). Psychosocial adjustment among children experiencing persistent and intermittent family economic hardship. Child Development, 66, 1107-1129.

Brooks-Gunn, J., Berlin, L. & Fuligni, A. (2000). Early childhood intervention programs: What about the family? In J. Schonkoff & S. Meisels (Eds.) Handbook of early childhood intervention (2nd Edition). New York: Cambridge University Press.

Brooks-Gunn, J., Duncan, G. & Aber, J. L. (1997). Neighborhood poverty: Context and consequences for children. New York: Russell Sage.

Burchinal, M. R., Roberts, J. E., Riggins, R., Zeisel, S. A., Neebe, E. & Bryant, D. (2000). Relating quality of center-based child care to early cognitive and language development longitudinally. Child Development, 71, 339-357.

Campbell, S. B, Shaw, D. S., & Gilliom, M. (2000). Early externalizing behavior problems: Toddlers and preschoolers at risk for later maladjustment. Development and Psychopathology, 12, 467-488.

Chase-Lansdale, L. & Brooks-Gunn, J. (1995). Escape from poverty: What makes a difference for children? New York: Cambridge University Press.

Cohen, E. & Kaufmann, R. (2000). Early childhood mental health consultation. Washington D.C : Center for Mental Health Services, SAMHSA, US. Department of Health and Human Services.

Coie, J. D., Lochman, J., Terry, R. & Hyman, C. (1992). Predicting early adolescent disorder from childhood aggression and peer rejection. Journal of Consulting and Clinical Psychology, 60, 783-792.

Conduct Problems Prevention Research Group (1999). Initial impact of the Fast Track Prevention Trail for Conduct Problems: I. The high-risk sample, Journal of Consulting and Clinical Psychology, 67, 631-647.

Conduct Problem's Prevention Research Group (1999). Initial impact of the Fast Track Prevention Trial for Conduct Problems:II Classroom effects. Journal of Consulting and Clinical Psychology, 67, 648-657.

Coolahan, K., Fantuzzo, J. & Mendez, J. (2000). Preschool peer interaction and readiness to learn: Relations between classroom peer play and learning behavior and conduct. Journal of Educational Psychology, 92, 458-465.

Corcoran, J. (2000). Family interventions with child physical abuse and neglect: A critical review. Children and Youth Services Review, 22, 563-591.

Crick, N. R. & Dodge, K. A. (1994). A review and reformulation of social-information-processing mechanisms in children's social adjustment. Psychological Bulletin, 115, 74-101.

Cummings, E.M. & Davies, P. (1994). Children and marital conflict: The impact of family dispute and resolution. Guilford series on social and emotional development. New York, NY, USA: The Guilford Press.

Danziger, S., Corcoran, M., Danziger, S. Heflin, C., Kalil, A., Levine, J., Rosen, D., Seefeldt, K., Siefert, K. & Tolman, R. (1999). Barriers to the employment of welfare recipients. Paper presented at the Harvard University Inequality Summer Institute. Cambridge, MA.

Deater-Deckard, K. & Dodge, K. A. (1997). Externalizing problems and discipline revisited: Nonlinear effects and variation by culture, context and gender. Psychological Inquiry, 8, 161-175.

Deater-Deckard, K., Dodge, K. A., Bates, J., Pettit, G. (1998). Multiple risk factors in the development of externalizing behavior problems: Group and individual differences. Development and Psychopathology, 10, 469-493.

Denham, S. A. & Burton, R. (1996). A social-emotional intervention for at-risk 4-year-olds. Journal of School Psychology, 34, 3, 225-245.

Denham, S. A., Workman, E., Cole, P. M., Weissbrod, C., Kendziora, K. T., & Zahn-Waxler, C. (2000). Prediction of externalizing behavior problems from early to middle childhood: The role of parental socialization and emotion expression. Development and Psychopathology, 12, 23-45.

Dickstein, S., Seifer, R., Hayden, L., Schiller, M., Sameroff, A.J., Keitner, G., Miller, I., Rasmussen, S., Matzko, M., & Dodge-Magee, K. (1998). Levels of family assessment II: Impact of maternal psychopathology of family functioning. Journal of Family Psychology, 12, 23-40

Dodge, K. A. & Feldman, E. (1990). Issues in social cognition and sociometric status. In S. A. Asher and J. .D. Coie (Eds). Peer rejection in childhood, (pp. 119-154) NY: Cambridge University Press.

Dodge, K. A., Pettit, G. S. & Bates, J. E. (1994). Socialization mediators of the relations between socioeconomic status and child conduct problems. Child Development, 65, 649-660.

Duncan, G. J. & Brooks-Gunn, J. (2000). Family poverty, Welfare Reform and child development. Child Development, 71, 188-196.

Duncan, G.J., Brooks-Gunn, J., & Klebanov, P.K. (1994). Economic deprivation and early childhood development. Child Development, 65, 296-318.

Duncan, G. J., Yeung, W. J., Brooks-Gunn, J. & Smith, J. R. (1998). How much does childhood poverty affect the life chances of children? American Sociological Review, 63, 406-423.

Eddy, J. M., Reid, J. B. & Fetrow, R. A. (2000). An elementary school-based prevention program targeting modifiable antecedents of youth delinquency and violence: Linking the Interests of Families and Teachers (LIFT). Journal of Emotional and Behavioral Disorders, 8, 165-176.

Eisenberg, N. & Fabes, R.A. (1992). Emotion, regulation, and the development of social competence. In Clark, Margaret S. (Ed) et al., Emotion and social behavior. Review of personality and social psychology, Vol.14, (pp. 119-150). Newbury Park, CA, USA: Sage Publications.

Eisenberg, N., Cumberland, A. & Spinrad, T. L. (1998). Parental socialization of emotion. Psychological Inquiry, 9, 241-273.

Fantuzzo, J., Coolahan, K., Mendez, McDermott, P., & Sutton-Smith, B. (1998). Contextually-relevant validation of peer play constructs with African American Head Start children: Penn Interactive Peer Play Scale. Early Childhood Research Quarterly, 13, 411-431.

Fantuzzo, J., Stolzfus, J., Lutz, M. N., Hamlet, H., Balraj, V., Turner, C. & Mosca, S. (1999). An evaluation of special needs referral process for low-income preschool children with emotional and behavioral problems. Early Childhood Research Quarterly, 4, 465-482.

Foster, E. M., Kelsch, C. C., Kamradt, B., Sosna, T., & Yang, S. (2001). Expenditures and sustainability in systems of care. Journal of Emotional And Behavioral Disorders, 9, 53-62.

58 BEST COPY AVAILABLE

Frey, K. S., Hirshstein, M. K., & Guzzo, B. A. (2000). Second Step: Preventing aggression by promoting social competence. Journal of Emotional and Behavioral Disorders, 8, 102-112.

Garcia Coll, C. T, Meyer, E. C., Brillon, L. (1995). Ethnic and minority parenting. M. H. Bornstein, et al. (Eds). Handbook of parenting, Vol. 2: Biology and ecology of parenting (pp. 189-209). Mahwah, NJ, USA: Lawrence Erlbaum Associates, Inc.

Garner, P.W., Jones, D. C., Gaddy, G. & Rennie, K. M. (1997). Low-income mothers' conversations about emotions and their children's emotional competence. Social Development, 6, 37-52.

Garner, P. W. & Spears, F. M. (2000). Emotion regulation in low-income preschoolers. Social Development, 9, 246-264.

Gilliam, W. S. & Zigler, E. F. (2001). A critical meta-analysis of all evaluations of state-funded preschool from 1977 to 1998: Implications for policy, service delivery and program evaluation. Early Childhood Research Quarterly, 15, 441-474.

Gomby, D. S., Culross, P. L., & Behrman, R. E. (1999). Home visiting: Recent program evaluations – Analysis and recommendations. The Future of Children, 9, 4-26.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. Journal of Family Psychology, 10, 243-268.

Goodston, B. D., Layzer, J. I., St. Pierre, R. G., Bernstein, L. S., & Lopez, M. (2000). Effectiveness of a comprehensive, five-year family support program for low-income children and their families: Findings from the Comprehensive Child Development Program. Early Childhood Research Quarterly, 15, 5-39.

Greenberg, M T., Domitrovitch, C., & Bumbarger, B. (1999). Preventing mental disorder in school-aged children: A review of the effectiveness of prevention programs. A report submitted to the Cetner for Mental Health Services, Substance Abuse Mental Health Services Administration ,U.S. Department of Health and Human Services.

Greenberg, M. T., Lengua, L. J., Coie, J. D., Pinderhughes, E. E., Bierman, K., Dodge, K. A, Lochman, J. E., & McMahon, R. J. (1999). Predicting developmental outcomes at school entry using a multiple-risk model: Four American communities. Developmental Psychology, 35, 403-417.

Grella, C. E. (1996). Background and overview of mental health and substance abuse treatment systems: Meeting the needs of women who are pregnant or parenting. Journal of Psychoactive Drugs, 28, 319-343.

Gyamfi, P., Brooks-Gunn, J. & Jackson, A. O. (2001). Associations between employment, and financial and parental stress in low-income single Black mothers. Women and Health, 32.

Hagekull, B. & Bohlin, G. (1995). Day care quality, family and child characteristics, and socioemotional development. Early Childhood Research Quarterly, 10, 505-526.

Hamre, B. K. & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through Eighth grade. Child Development, 72, 625-638.

Henggeler, S.W.(1999). Multisystemic therapy: An overview of clinical procedures, outcomes, and policy implications. Child Psychology & Psychiatry Review, 4, 2-10.

Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms. Psychological Bulletin, 111, 127-155.

Huston, A. C., Duncan, G. J., Granger, R., Bos, J., McLoyd, V., Mistry, R., Crosby, D., Gibson, C., Magnuson, K., Romich, J., & Ventura, A. (2001). Work-based antipoverty programs for parents can enhance the school performance and social behavior of children. Child Development, 72, 318-336.

Hyson, M. C. (1994). The emotional development of young children. New York: Teachers College Press.

Ialongo, N., Poduska, J., Werthamer, L., & Kellam, S. (2001). The distal impact of two first-grade preventive interventions on conduct problems and disorder in early adolescence. Journal of Emotional and Behavioral Disorders, 9, 146-161.

Jimerson, S., Egeland, B., Sroufe, A., & Carlson, B. (2000). A prospective longitudinal study of high school dropouts examining multiple predictors across development. Journal of School Psychology, 38, 525-549.

Katz, L. F., Kling, J. R., & Liebman, J. B. (in press). Moving to Opportunity in Boston: Early results of a randomized mobility experiment. Quarterly Journal of Economics.

Kazdin, A. E. (1987). Treatment of antisocial behavior in children: Current status and future directions. Psychological Bulletin, 102, 187-203.

Kazdin, A. E., Mazurick, J. L., & Bass, D. (1993). Risk for attrition in treatment of antisocial children and families. Journal of Clinical Child Psychology, 22, 2-16.

Knitzer, J. (1993). Children's mental health policy: Challenging the future. Journal of Emotional and Behavioral Disorders, 1, 8-16.

Knitzer, J., Cauthen, N. K., & Kisker, E. (1999). Enhancing the well-being of young children and families in the context of welfare reform. Washington DC: Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services.

Knitzer, J., Yoshikawa, H., Cauthen, N. K., & Aber, J. L. (2000). Welfare reform, family support, and child development: Perspectives from policy analysis and developmental psychopathology. Development and Psychopathology, 12, 619-632.

Kochanska, G. & Akshan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. Child Development, 66, 236-254.

Kopp, C. (1989). Regulation of distress and negative emotions: A developmental perspective. Developmental Psychology, 25, 343-354.

Kuperschmidt, J. B., Bryant, D., & Willoughby, M. (2000). Prevalence of aggressive behaviors among preschoolers in Head Start and community child care programs. Behavioral Disorders, 26, 42-52.

Kupersmidt, J. B. & Coie, J. D. (1990). Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. Child Development, 61, 1350-1362.

Ladd, G. W. (1990). Having friends, keeping friends, making friends and being liked by peers in the classroom: Predictors of children's early school adjustment? Child Development, 61, 1081-1100.

Ladd, G. W., Birch, S. H. & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? Child Development, 70, 1373-1400.

Ladd, G. W., Kochenderfer, B. J. & Coleman, C. (1997). Classroom peer acceptance, friendship and victimization: Distinct relational systems that contribute uniquely to children's school adjustment. Child Development, 68, 1181-1197.

Lamb-Parker, F., Piotrowski, C. S., Baker, . J. L., Kessler-Sklar, S., Clark, B. & Peay, L. (2001). Understanding barriers to parent involvement in Head Start: A research community partnership. Early Childhood Research Quarterly, 16, 35-51.

Lara, S. L., McCabe, L. A. & Brooks-Gunn, J. (2000). From horizontal to vertical management styles: A qualitative look at Head Start staff strategies for addressing behavior problems. Early Education and Development, 11, 283-306.

Lemerise, E. A. & Arsenio, W. F. (2000). An integrated model of emotional processes and cognition in social information processing. Child Development, 71, 107-118.

Lennon, M. C., Bloome, J. & English, K. (2001). Depression and low-income women: Challenges for TNAF and welfare-to-work policies and programs. New York: National Center for Children in Poverty.

Lester, B. M., Boukydis, C. F. Z. & Twomey, J. E. (2000). Maternal substance abuse and child outcome. In C. H. Zeanah (Ed.), Handbook of Infant Mental Health (2nd Edition), New York: Guilford Press, pp. 161-175.

Liaw, F., Meisels, S. J. & Brooks-Gunn, J. (1995). The effects of experience of early intervention on low birth weight, premature children: the Infant Health and Development Program. Early Childhood Research Quarterly, 10, 405-431.

Lochman, J. E. and the Conduct Problems Prevention Research Group (1995). Screening for child behavior problems for prevention programs at school entry. Journal of Consulting and Clinical Psychology, 63, 549-559.

Loeber, R., Keenan, K. & Zhang, Q. (1997). Boys' experimentation and persistence in developmental pathways toward serious delinquency. Journal of Child and Family Studies, 6, 321-357.

Mayer, S. E. (1997). What money can't buy, Family income and children's life chances. Camridge, MA: Harvard University Press.

McCartney, K. & Rosenthal, R. (2000). Effect size, practical importance and social policy for children. Child Development, 71, 173-180.

McEvoy, A. & Welker, R. (2000). Antisocial behavior, academic failure and school climate: A critical review. Journal of Emotional and Behavioral Disorders, 8, 130-140.

McLelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. Early Childhood Research Quarterly, 15, 307-329.

Miller-Johnson, S., Coie, J. D., Maumary-Gremaud, A., Lochman, J., & Terry, R. (1999). Relationship between childhood peer rejection and aggression and adolescent delinquency severity and type among African American youth. Journal of Emotional and Behavioral Disorders, 7, 137-146.

Moffit, T. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. Psychological Review, 100, 674-701.

Morris, P. A. (2002). The effects of Welfare Reform policies on children. Social Policy Report, 16, 4-19.

Morris, P, Huston, A., Duncan, G., Crobsy, D., & Bos, H. (2001). How welfare and work policies affect children: A synthesis of research. New York: MDRC.

59 BEST COPY AVAILABLE

Murray, C. & Greenberg, M. T. (2000). Children's relationships with teachers and bonds with school: An investigation of patterns and correlates in middle childhood. Journal of School Psychology, 38, 423-445.

Nagin, D. & Tremblay, R. E. (1999). Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. Child Development, 70, 1181-1196.

National Education Goals Panel (1996). The national education goals report: Building a nation of learners. Washington D.C.: US Government Printing Office.

Olds, D. L., Henderson, C. R., Cole, R., Eckenrode, J. Kitzman, H., Lukcey, D., Pettit, L., Sidora, K., Morris, P. & Powers, J. (1998). Long-term effects of nurse home visitation on children's criminal and antisocial behavior: A 15 year follow-up of a randomized controlled trial. Journal of the American Medical Association, 280, 1238-1244.

O'Neil, R., Walsh, M., Parke, R. D., Wang, S. & Strand, C. (1997). A longitudinal assessment of the academic correlates of early peer acceptance and rejection. Journal of Clinical Child Psychology, 26, 290-303.

Orrell-Valente, J. K., Pinderhughes, E. E., Valente, E., Laird, R. D., & Conduct Problems Prevention Research Group (1999). If its offered will they come?" Influences on parents' participation in a community-based conduct problems prevention program. American Journal of Community Psychology, 27, 753-783.

Patterson, G. R., Capaldi, D. M. & Bank, L. (1991). An early starter model for predicting delinquency. In D. J. Pepler and K. H. Rubin (Eds). The development and treatment of childhood aggression. (pp. 139-168). Hillsdale, NJ: Erlbaum.

Patterson, G. R., Reid, J. B. & Dishion, T. J. (1992). A social learning approach, IV Antisocial boys. Eugene Oregon: Castalia.

Pianta, R. C. (1994). Patterns of relationships between children and kindergarten teachers. Journal of School Psychology, 32,15-31.

Quinn, M. M., Kavali, K. A., Mathur, S. R., Rutherford, R. B., & Forness, S. R. (1999). A meta-analysis of social skills interventions for students with emotional and behavioral disorders. Journal of Emotional and Behavioral Disorders, 7, 54-64.

Raikes, H. H. & Love, J. M. (2002). Early Head Start: A dynamic new program for infants and toddlers and their families. Infant Mental Health Journal, 23, 1-13.

Raver, C. C. & Zigler, E. F. (1997). Social competence: An untapped dimension in evaluating Head Start's success. Early Childhood Research Quarterly, 12, 363-385.

Reynolds, A. J. (1999). Educational success in high-risk settings: Contributions of the Chicago Longitudinal Study. Journal of School Psychology, 37, 345-354.

Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgements of problems in the transition to Kindergarten. Early Childhood Research Quarterly, 15, 147-166.

Rosenfield, S. (1992). Developing school-based consultation teams: A design for organizational change. School Psychology Quarterly, 7, 27-46.

Rubin, K. H., Coplan, R. J., Fox, N. A. & Calkins, S., D. (1995). Emotionality, emotion regulation, and preschooler's social adaptation. Development and Psychopathology, 7, 49-62.

Saarni, C. (1990). Emotional competence: How emotions and relationships become integrated. In R. Thompson (Ed.) Nebraska Symposium on Motivation 1988:Socioemotional development (115-182) Lincoln, NB: University of Nebraska Press.

Sameroff, A. J., Seifer, R., Baldwin, A. & Baldwin, C. (1993). Stability of intelligence from preschool to adolscence: The influence of social and family risk factors. Child Development, 64, 80-97.

Serketich, W. J. & Dumas, J. E. (1986). The effectiveness of behavioral parent training to modify antisocial behavior in children: A meta-analysis. Behavior Therapy, 27, 171-186.

Shores, R. E. & Wehby, J. H. (1999). Analyzing the classroom social behavior of students with EBD. Journal of Emotional and Behavioral Disorders, 7, 194-199.

Spieker, S. J., Larson, N. C., Lewis, S. M., Keller, T. E., & Gilchrist, L. (1999). Developmental trajectories of disruptive behavior problems in preschool children of adolescent mothers. Child Development, 70, 443-458.

Stoolmiller, M., Eddy, J. M., & Reid, J. B. (2000). Detecting and describing preventive intervention effects in universal school-based randomized trials targeting delinquent and violent behaviors. Journal of Consulting and Clinical Psychology, 68, 296-306.

St. Pierre, R. G. & Layzer, J. I. (1998). Improving the life chances of children in poverty: Assumptions and what we have learned. Social Policy Report, Society for Research in Child Development, 12, 1-21.

Thompson, R. (1994). Emotion regulation: A theme in search of a definition. Monographs of the Society for Research in Child Development, 59 (2-3, Serial no. 240). 25-52.

Tremblay, R. E., Pagani-Kurtz, L., Masse, L. C., Vitaro, F. & Pihl, R. O. (1995). A bimodal preventative intervnetion for disruptive kindergarten boys: Its impact through mid-adolescence. Journal of Consulting and Clinical Psychology, 63, 560-568.

U. S. Department of Health and Human Services (2001). Building their futures: How early Head Start programs are enhancing the lives of infants and toddlers in low-income families. Summary report. Washington, DC: The Commissioner's Office of Research and Evaluation And the Head Start Bureau Administration on Children, Youth and Families.

Vitaro, F., Brendgen, M. & Tremblay, R. E. (1999). Prevention of school dropout through the reduction of disruptive behaviors and school failure in elementary school. Journal of School Psychology, 37, 205-226.

Vitaro, F., Larocque, D., Janosz, M & Tremblay, R. E. (2001). Negative social experiences and dropping out of school. Journal of Educational Psychology, 93, 312-319.

Wakschlag, L. S. & Hans, S. L. (1999). Relation of maternal responsiveness during infancy to the development of behavior probles in high-risk youth. Developmental Psychology, 35.

Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: Strengthening parenting competencies. Journal of Consulting and Clinical Psychology, 6, 715-730.

Webster-Stratton, C. & Hammond, M. (1997). Treating children with early onset conduct problems: A comparison of child and parenting interventions. Journal of Consulting and Clinical Psychology, 65, 93-109.

Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. Journal of Child Clinical Psychology, 30, 283-302.

Webster-Stratton, C. & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency and violence in adolescence through interventions targeted at young children. Prevention Science, 2, 165-192.

Wehby, J. H., Dodge, K. A., & Valente, E. (1996). School behavior of first grade children identified as at-risk for development of conduct problems. Behavioral Disorders, 19, 67-78.

Wentzel, K. R. & Asher, S. R. (1995). The academic lives of neglected, rejected, popular, and controversial children. Child Development ,66, 754-763.

Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. Psychological Bulletin, 115, 1-27.

Yoshikawa, H. (1999). Welfare dynamics, support services, mothers' earnings, and child cognitive development: Implications for contemporary welfare reform. Child Development, 70, 779-801.

Yoshikawa, H. & Knitzer, J. (1997). Lessons from the field: Head Start mental health strategies to meet changing needs. New York: National Center for Children in Poverty.

Yoshikawa, H., Rosman, E. A., & Hsueh, J. (2001). Variation in teenage mothers' experiences of child care and other components of welfare reform: Selection processes and developmental consequences. Child Development, 72, 299-317.

Zigler, E. F. & Styfco, S. (1995). Head Start and beyond: A national plan for extended childhood intervention. New Haven, CT: Yale University Press.

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Purpose

Social Policy Report (ISSN 1075-7031) is published four times a year by the Society for Research in Child Development. Its purpose is twofold: (1) to provide policymakers with objective reviews of research findings on topics of current national interest, and (2) to inform the SRCD membership about current policy issues relating to children and about the state of relevant research.

Content

The *Report* provides a forum for scholarly reviews and discussions of developmental research and its implications for policies affecting children. The Society recognizes that few policy issues are noncontroversial, that authors may well have a "point of view," but the *Report* is not intended to be a vehicle for authors to advocate particular positions on issues. Presentations should be balanced, accurate, and inclusive. The publication nonetheless includes the disclaimer that the views expressed do not necessarily reflect those of the Society or the editors.

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Social Policy Report

Giving Child and Youth Development Knowledge Away

Volume XVI, Number IV 2002

Towards an Understanding of the Impact of Welfare Reform on Children with Disabilities and Their Families: Setting a Research and Policy Agenda

Elisa A. Rosman, Hirokazu Yoshikawa, and Jane Knitzer

Summary

Increasing attention is being paid to the question of how special populations are affected by welfare reform. One subgroup that has been largely ignored in research concerning the effects of welfare reform on children and families is that of children with disabilities and their families. In order to address this gap in both policy and research, this paper aims to develop a research agenda that will inform both the policy and research worlds by developing policy-relevant data, spurring those in welfare and policy fields to consider individuals with disabilities and their families when designing research and creating policies, and spurring those in disability-related fields to consider the effects of poverty and its attendant policies. This paper discusses these central questions:

1. What do we already know about families who are on welfare and have children with disabilities?
2. What are the developmental processes through which we expect the challenges of welfare reform to affect these children?
3. What changes in current policy and practice are feasible and would work towards increased self-sufficiency and increased quality of life for these families?

The paper concludes with research questions and preliminary policy recommendations to stimulate active consideration of a population that is too often ignored in consideration of welfare and anti-poverty policy.

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Social Policy Report

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From the Editor

It is a pleasure to present the third Social Policy Report in a series on welfare reform, children and families. The first, by Reichman and Mclanahan, examined effects of welfare reform experiments that were precursors to the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). The second, by Morris, summarized the findings from the experiments following the PRWORA, in terms of child well-being. The third, by Rosman, Yoshikawa, and Knitzer, focuses on a specific group of families-those who have a child with a disability. The authors' premise is that such families are likely to find it difficult to manage work and family issues, given the health and schooling demands of their children. Hebbeler, in a brief comment, urges policy scholars to take advantage of three relatively new data sets to address the issues raised by Rosman et al. Lonnie Sherrod and I hope that this SPR will garner support for policies and practices targeting low-income parents who have children with disabilities.

Jeanne Brooks-Gunn, Ph.D., Associate Editor
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Towards an Understanding of the Impact of Welfare Reform on Children with Disabilities and Their Families: Setting a Research and Policy Agenda

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As welfare rolls fell drastically in the late 1990's following passage of federal welfare reform legislation, concerns grew about those who remained on welfare, and/or faced serious barriers to employment (Danziger et al., 2000; Rosman, McCarthy, & Woolverton, 2001; Yoshikawa, Magnuson, Bos, & Hsueh, 2002; Zedlewski, 1999). One barrier that has been identified but not well-explored in either the research or policy communities is having a child with a disability. In discussions about those who remain on welfare due to barriers—a group variously referred to as the hard to employ, those with multiple barriers, and floundering families (Berlin, 2001; Danziger et al., 2000; Haskins, Sawhill & Weaver, 2001)—having a child with a disability is usually included in the laundry list of barriers. However, the specific and unique implications for families of having a child a disability are almost never considered. This population is one about which we know very little, despite recognition that the law could have serious implications for these families (Harbin, 1998; Janko-Summers, 1998, Ohlson, 1998). In fact, little is known about families living in poverty who have children with disabilities in general (Park, Turnbull & Turnbull, 2002). Further exploration of the unique challenges this population faces, as well as a better understanding of the mechanisms through which the law may affect these children and families, is necessary in order to begin to make policy recommendations.

This paper aims to develop a research and policy agenda that will address the needs of families who are poor and have children with disabilities. In order to develop this agenda, it poses the following questions:

1. What do we already know about families who are on welfare and have children with disabilities?
2. What are the developmental processes through which we expect the challenges of welfare reform to affect these children?
3. What changes in current policy and practice are feasible and would work towards increased self-sufficiency and increased quality of life for these families?

What do we already know about families who are on welfare and have children with disabilities?

Definitions

One difficulty in assessing policy impacts on children with disabilities is that of developing a definition of what constitutes childhood disability (McNeil, 1997). The Individuals with Disabilities Education Act (IDEA), most recently amended in 1997 (P.L. 105-117), presents the following definitions. Under Part C of the law, which establishes services for infants and toddlers with disabilities, an infant or toddler is considered to have a disability if: 1) he/she is experiencing developmental delays in one or more of the areas of cognitive, physical, communication, social/emotional, or adaptive development (criteria defined more specifically by the individual states); 2) he/she has a diagnosed physical or mental condition that has a "high probability" of resulting in developmental delay; or 3) he/she is considered to be at-risk (states can chose whether or not to serve this last group of children and define the criteria). (P.L. 105-117; §632 (5)). For children over the age of three, Part B of the law defines thirteen categories of disability under which children can qualify for services: autism, deafness, deaf-blindness, hearing impairments, mental retardation, multiple disabilities, orthopedic impairment, other health impairment (e.g. AIDS, asthma, diabetes), serious emotional disturbance, specific learning disability, speech/language impairment, traumatic brain injury, and visual impairment.[1] In research studies, definitions vary greatly. National studies such as the Survey of Income and Program Participation (SIPP), the National Health Interview Survey (NHIS), and the National Longitudinal Survey of Youth (NLSY) use a variety of terms, including impairment, condition, limitations, and disability, all of which are defined slightly differently (Loprest & Acs, 1996). Thus, in examining literature related to disabilities, it is important to pay close attention to the definitions employed.

Prevalence Rates

Childhood disability is over-represented among families in poverty and families on welfare. Newacheck, Jameson and Halfon (1994) found that "poor children experience a disproportionate number of health problems" (1994, p. 232); using data from the NHIS, they found that children from families with incomes below $10,000 were more than twice as likely to report limitations in activities as their peers in families with incomes at or above $35,000. Furthermore, parents of children in low-income families reported 38% more behavioral problems in their children than did parents of children in higher-income families. Researchers have documented a significant increase in the rates of childhood disability over the past fourteen years (from 3.94 million children aged 3 to 21 in 1983 to 4.99 million in 1996), which seems to be concentrated among "constituencies defined by poverty and single-parent headed families" (Fujiura & Yamaki, 2000, p. 194).

Some studies have explored the prevalence of disability among children whose families receive welfare. These studies are pre-Temporary Assistance to Needy Families (TANF) and focus on children in families receiving Aid to Families with Dependent Children (AFDC). Ohlson (1998) cites studies finding that anywhere from 8 to 21% of families on welfare had a child with a disability. Using data from the SIPP, the NHIS, and the NLSY, Loprest and Acs (1996) found that almost 16% of the families in their sample had a child with some type of functional limitation. In a sample of AFDC recipients in California, Meyers, Lukemeyer and Smeeding (1996) found that 21% of the women reported having at least one child with a disability or chronic health problem. There is difficulty in comparing across studies due to the varying definitions of disability and to the possibility of under-diagnosis, but these figures suggest that this is a sizeable population that neither researchers nor policy makers should ignore.

Childhood disability is over-represented among families in poverty and families on welfare.

Experiences of having a child with a disability in the family system

Family systems theory recognizes that parents and children can affect each other in complex ways. While research in the past decade has emphasized the strengths and competencies of families who have children with disabilities, there is still the recognition that raising a child with a disability can be a difficult endeavor, bringing with it unique challenges. Raising a child with a disability carries both psychological and economic costs. Among psychological costs, parents have to deal with concern about the child's future, extra caregiving tasks, and the realization that a child expected to be "normal" is not. Economic costs include out-of-pocket (i.e. not reimbursed) medical expenses, transportation to and from appointments, baby-sitting for other siblings while attending treatments for the child, special clothing, special food for children on specialized diets, and specialized day care (Meyers, Brady & Seto, 2000).

Recognizing the above demands, research has found increased levels of parenting stress and negative affect among mothers who have children with disabilities (Beckman, 1983; Boyce, Behl, Mortensen & Akers, 1991; Dyson, 1993; Friedich & Friedrich, 1981). This fact is especially relevant for the families being considered here, since research also shows increased levels of depression among mothers in poverty (for a review, see Rosman et al., 2001). Parenting stress has been associated with lower levels of parenting satisfaction, higher levels of symptoms and abusive behavior, and insecure child attachment (for a review, see Smith, Oliver & Innocenti, 2001). Furthermore, both parenting stress and depression have been linked to more negative parenting styles and, in turn, to more negative child outcomes (Alpern & Lyons-Ruth, 1993; Downey & Coyne, 1990; Huston, McLoyd, & Garcia Coll, 1994; Kalil & Eccles, 1998; McLoyd, 1990).

It is also important to note that, even within the subgroup of families receiving welfare who have children with disabilities, there are important differences relating to type and severity of disability, as well as age of child. As Seligman and Darling (1989) stress in their discussion of the impact of having a child with a disability on the family system, some disabling conditions have greater impact on family functioning than others. Specific characteristics of a child's disability, such as the child's level of functioning or degree of impairment, may predict parenting stress and depression (Scorgie, Wilgosh & McDonald, 1998). Such characteristics as a child's social responsiveness, caregiving demands, temperament, communication skills, and level of behavior problems have been found to predict parenting stress (Beckman, 1983; Frey, Greenberg, & Fewell, 1989; Hauser-Cram, Warfield, Shonkoff, & Kruass, 2001). The age of the child will also help determine the impact on the

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family. For example, a school-age child will be in school several hours a day, leaving the parent available to meet work requirements. However, early intervention services provided to families of infants with disability are primarily home-based. Having to be home for the child to receive services effectively precludes a parent's ability to participate in work requirements.

The cornerstone of PRWORA is its "work first" philosophy. However, research shows that it is particularly difficult for women who are caring for children with disabilities to maintain employment.

Components of PRWORA that may affect families with children with disabilities

The cornerstone of PRWORA is its "work first" philosophy, which explicitly links welfare receipt with work participation (for a review of work requirements, see Relave, 1999). However, research shows that it is more difficult for women who are caring for children with disabilities to maintain employment. This may be due to difficulties in finding appropriate child care, to a mother's belief that she is best able to care for her child, or to the simple inability to hold down a job due to such factors as frequent doctor's visits, early intervention appointments, suspension from school due to behavior, or therapy sessions.

For example, consider a mother whose newborn has just been diagnosed with Down syndrome. She must cope with numerous doctor's visits surrounding the medical complications that often accompany Down syndrome, try to establish an early intervention plan, and face the emotional issues associated with having a child with a disability. And she may also be in a state that requires the primary caregiver to return immediately to work, creating a set of conflicting demands. The conflict that arises when a mother has a sick child and has to conform with welfare requirements was poignantly expressed by a participant in a focus group of welfare recipients in New Jersey. She spoke of the experience of having to go to a job search center right after her one-month-old was released from the hospital, where he had had surgery for pyloric stenosis: "...I had to go right down to job search, as soon as my son got out of the hospital. Mind you, I had him in February, he went to the hospital in March. At the end of March I was in class. That's ridiculous" (Rosman & Yoshikawa, 2000). The effect of maternal employment, especially mandated employment, on children with disabilities themselves, has not been well-researched.

In the area of time limits, these families may be more likely to reach time limits or, before reaching time limits, to be sanctioned for non-compliance with work requirements, due to difficulties in finding and/or maintaining employment. PRWORA does allow states do exempt up to 20% of their current caseload from time limits. However, as the caseloads fall precipitously, that percentage doesn't cover as many families as it did in 1996. Even for states that offer exemptions and extensions for families caring for a household member with a disability, there is a great deal of uncertainty as to how consistently these categories are defined and, in turn, how well these exemptions and extensions are actually implemented (Rosman et al., 2001).

We also know that, while finding appropriate and affordable child care is an issue for almost all families receiving welfare (Children's Defense Fund, 2000; Miller et al., 2000), it may be especially problematic for families who have children with disabilities[2]. In a focus group study of women in Michigan who received welfare and had children with disabilities, LeRoy (2000) found that 72% of her sample cited availability of care, cost of care, quality of care, and knowledge and skills of the provider as barriers to their finding employment. Recent research shows that, although take-up of child care subsidies is remarkably low, the child care needs of welfare reform have been accommodated, except for care for infants, children with special needs, and during nonstandard work hours (Besharov & Samari, 2001). This may be due to a multitude of factors:

1. a dearth of specialized child care slots for children with special needs, particularly for children who are the most medically involved or have serious behavior problems (Ohlson, 1998)
2. difficulties in finding informal care, since it is more difficult to rely on family and friends or to "trade" child care favors when a child has special needs (Shearn & Todd, 2000)
3. child care subsidies that do not reflect market rates for children with special needs; in Michigan, the average hourly rate for specialized care is $4.80/hour, and the state-allotted subsidy is only $2.95/hour (LeRoy, 2000).

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Finally, we also know that the changes PRWORA made to the Supplemental Security Income (SSI) program by tightening the definition of disability for children (see Karoly, Klerman & Rogowski, 2001) resulted in fairly significant declines in SSI receipt. This loss of benefits can have severe financial impacts for families. SSI has been found to make the difference between living above or below the poverty line and to noticeably improve economic circumstances for families (Kearney, Gundmann, & Gallicchio, 1994; Meyers et al., 1996). According to Karoly et al., "To make up for the lost income [from SSI], families have turned to other sources of support, including public and private transfers and work. Whether these sources can be sustained, especially in a less robust economy, remains to be seen" (2001, p. 490).

A second consequence of loss of SSI benefits is that many children are also erroneously losing their Medicaid benefits. Though states are required to continue Medicaid coverage for children who have lost SSI due to redeterminations, many state Medicaid agencies have not yet implemented a process for ensuring that these children maintain their benefits (Bazelon Center for Mental Health Law, 2000; Family Voices, 1998).

What are the developmental processes through which we expect the challenges of welfare reform to affect these children?

The above section highlighted what we already know about families who have children with special needs and receive welfare. Because PRWORA is aimed at parents, the changes described above specifically affected parents. However, they have significant implications for children, as well. How might we expect the policy-level changes of PRWORA to affect children's development? This section proposes some possible mediational models, in which family-level mechanisms link TANF policy changes to developmental outcomes. The two mechanisms considered here involve family-level processes that may be most proximally related to child development: changes in family resources and changes in family routines.

Flexible work requirements can take into account unique constellations of stresses and strengths among families with children with disabilities.

Family Resources

As a result of TANF, levels of available family-level resources have declined across multiple domains (Yoshikawa & Hsueh, 2001), including time, money and supports. For example, mothers who had not previously worked and are forced to do so as a result of work requirements and time limits have found themselves with less time to spend with their children, as well as less time to spend on daily chores, such as laundry, cooking, and grocery shopping (London, Scott, Edin, & Hunter, 2000). Individuals may reach their time limits for welfare receipt without a job that will provide adequate income to support them and their families. The loss of SSI benefits may also mean the difference between living in or out of poverty (Kearney et al., 1994; Meyers et al., 1996). Since 1996, there have been large decreases in both Medicaid and Food Stamp receipt, even among families who remain eligible (Fix & Passel, 2002; Weil & Holahan, 2001; Zedlewski and Brauner; 1999a, 1999b). Such declines in family resources o be associated with more negative psychological outcomes and parenting styles among parents, which in turn can lead to more negative outcomes for children (Alpern & Lyons-Ruth, 1993; Downey & Coyne, 1990; Elder, Liker, & Cross, 1984; Elder, Ngyuen, & Caspi, 1985; Huston, McLoyd, & Garcia Coll, 1994; Kalil & Eccles, 1998; McLoyd & Wilson, 1991)[3].

Families who have children with special needs may be particularly vulnerable to declines in family resources. Even before taking levels of resources into account, parents raising a child with a disability may be at increased risk for higher levels of parenting stress and negative affect (Boyce et al., 1991; Bradley, Rock, Whiteside, Caldwell,& Brisby, 1991; Margalit & Ankonina, 1991). These families must cope with the emotional issues of coming to terms with having a child with a disability, which involve shifting the family's "cultural model" of what to expect in infancy and early childhood (Weisner, Matheson, & Bernheimer, 1996), as well as accepting that a child assumed to be normal actually is not (Seligman & Darling, 1989). They must also navigate the time demands of doctors' visits, early intervention programs, and finding a child care setting that will accept a child with special needs. These stresses and sadnesses are often chronic: not only is

Research in progress on poverty and childhood disability

The findings presented in this article are drawn from disparate sources, and no one study (with the exception of the LeRoy study, which is a small, focus group study) presents a coherent picture of the lives of families who are poor and have children with disabilities. However, we do know that there are several research studies examining these families that will report findings in the near future. These include:

- **"The Impact of Welfare Reform on Families with Members with Disabilities," a component of "Welfare, Children, & Families: A Three City Study"**

This study is a four-year, ethnographic research project, embedded in a larger quantitative and ethnographic study. It consists of in-depth interviews with forty families who receive TANF benefits and also have a child under age eight who has a disability. The principal investigator is Debra Skinner at the Frank Porter Graham Child Development Center of the University of North Carolina at Chapel Hill. For further information, see: http://www.fpg.unc.edu/activities/Projectsdatabase/a_Detail.cfm?ID=141.

- **"Urban Change"**

This is a multidisciplinary study of how the revolutionary changes in welfare policy embodied in the federal welfare reform legislation of 1996 are playing out in four of the nation's largest urban counties. A portion of the ethnographic component of the study focuses on the challenges faced by families who have children with disabilities. For further information, see: http://www.mdrc.org/WelfareReform/UrbanChangepage.htm.

- **"A Mother's Work is Never Done: A Critical Analysis of Low-income Women's Roles as Financial Provider and Caretaker of Children with Special Needs"**

This dissertation is a qualitative study of families who are receiving welfare and have a child with a disability. The goal is to understand how mothers make the choice between working and caring for their children, as well as identifying support systems and work environments that enable the successful transition from welfare to work. For further information contact Chrishana Lloyd at clloyd@UDel.edu.

- **"At the Crossroads of Poverty and Disability: An Ecological Approach to Predicting Maternal Outcomes in Families who are Poor and Have Young Children with Disabilities"**

This study will examine stress and depression outcomes among low-income mothers who have a child receiving early intervention services. The study will employ an ecological model that looks beyond the immediate family to the impact of the family's involvement with three systems: disability- and poverty-related services and programs, maternal employment, and child care. For further information contact Elisa Rosman at ear222@nyu.edu.

there stress at the time of discovery of the disability, but parents of children with disabilities often experience stress and feelings of grief at many points throughout the child's life, as milestones are delayed or missed completely (Stoneman & Manders, 1998). The cumulative impact of these stressful events, especially if combined with the losses in family resources just discussed, may increase mental health problems for parents in poverty, and ultimately lead to more negative child outcomes.

From a policy perspective, it is also important to consider the role of increased resources. Can maintaining or raising levels of resources within the context of welfare reform ameliorate risk and lead to more positive developmental outcomes? Two recent welfare-to-work experiments provide examples of what these positive effects might look like by "making work pay", either through an earnings supplement (New Hope; Bos et al., 1999; Huston et al., 2001), or an earnings disregard (Minnesota Family Investment Program, MFIP; Gennetian & Miller, 2000; Knox, Miller, & Gennetian, 2000). Both programs demonstrated positive effects on a variety of parent and child outcomes, including school performance and behavior problems (Bos et al. 1999; Gennetian & Miller, 2000; Huston et al., 2001). The effect these programs may have had on families with children with disabilities is unclear.

Family Routines

PRWORA's policy changes may not only change availability of family-level resources, but also necessitate that families reorganize or restructure their daily lives. Researchers have examined the importance of family routines or "life management strategies," suggesting that the ability to maintain structures and routines is conducive to positive development for all family members (Gallimore, Bernheimer, & Weisner, 1999; Scorgie, Wilgosh & McDonald, 1996). The changing time constraints mentioned above mean that carefully constructed routines may have to be altered. A mother who had created with her child a nighttime routine of a bath and a story before bedtime may no longer have the time or energy to maintain that routine if required to work full-time or in the evening. Similarly, a mother who established a pattern of going to three or four different grocery stores a week in order to capitalize on sales and make the most of her Food Stamps may simply no longer have that kind of time and may find that her Food Stamps (if she still receives them) do not stretch as far as they once did (Rosman & Yoshikawa, 2000).

As with the family resource model, the effects of policy-driven changes in family routines on children may be especially prominent in families that include a child with special needs. Having a child with a disability and reacting to changes brought about by PRWORA are both situations that require restructuring if the family is to sustain a daily routine. For example, work requirements under PRWORA or loss of SSI benefits may result in the following scenario: A mother who was able to stay home with her children and, therefore, had time to communicate with the child's teacher, attend Individualized Education Plan meetings, and take care of the neighbor's children in exchange for occasional use of the neighbor's car, now needs to disrupt this routine in order to attend work. In order to work, the mother may arrange for a relative to bring the child to and from school, leaving her unable to communicate daily with the teacher about her child's progress. These changes affect every family member, as well as the balance that the family has established and been able to maintain.

Thus, the balancing of caregiving, work, and family roles that low-income families who have children with disabilities construct are often precarious and easily disrupted (perhaps even more so than among families in poverty; Edin & Lein, 1997). These disruptions have implications for every aspect of the family's day, as eloquently described here by a mother of a child with a disability:

> Where is that fifteen minutes [to carry out the intervention plan] going to come from? What am I supposed to give up? Taking the kids to the park? Reading a bedtime story to my eldest? Washing the breakfast dishes? Sorting the laundry? Grading students' papers? Because there is no time in my life that hasn't been spoken for, and for every fifteen-minute activity that is added, one has to be taken away. (Featherstone, 1981, p. 78)

What are the implications of the above for welfare policy? What changes are feasible and would work towards increased self-sufficiency and increased quality of life for these families?

Clearly, more research is necessary on families in or near poverty who have children with disabilities. "Raising a child with a disability" can no longer simply be listed as part of a laundry list of barriers to employment. Welfare and poverty research must begin to include a focus on these families, as well as on developmental mediators. The studies

Where Policies Intersect: Children with Disabilities, PRWORA and IDEA
Kathleen Hebbeler, SRI International

Numerous federal policies impact children with disabilities and their families. Some of the impacts are major and well recognized; others are major but less widely recognized. The Individuals with Disabilities Education Act (IDEA) is an example of the former. As the discussion in these pages makes clear, the Personal Responsibility and Work Opportunity Act (PRWORA) is an example of the latter. Both pieces of legislation are being reauthorized in the near future which presents an opportunity to craft coordinated policies that address the multiple challenges faced by poor families who have one or more children with a disability.

One approach to increasing what is known about the impact of welfare reform on the lives of families of children with disabilities and on the developmental outcomes of children is to design studies focused on welfare reform that look specifically at the subgroup of families with children with disabilities. A complementary approach is to look at children with disabilities and focus on the sub-group of families who are low income. There are three large scale studies underway that will allow for this second approach and that can inform the upcoming reauthorizations and future policy-making.

The Office of Special Education Programs in the U.S. Department of Education has funded a series of longitudinal studies that are looking at three age groups of children and youth with disabilities. The studies are the National Early Intervention Longitudinal Study (NEILS) which is following a sample of over 3300 infants and toddlers who received services provided through Part C of IDEA; the Special Education Elementary Longitudinal Study (SEELS) which is following a sample of 13,000 children who received special education in elementary school; and the second National Longitudinal Transition Study (NLTS2) which is following a sample of 12,000 adolescents who received special education in secondary school. All the studies involve a nationally representative sample of children with disabilities. SEELS and NLTS2 involve sufficient samples of each of the IDEA disability categories so that results for can be examined separately for children and youth with different disabilities. Each study is following its sample for several years. NEILS is following infants and toddlers into kindergarten; SEELS is following elementary students into secondary school, and NLTS2 is following secondary students into young adulthood.

NEILS is the oldest of the three studies and therefore in the best position at the present time to provide data related to welfare reform. Accommodating welfare reform within the context of early intervention services is especially important because Pt. C services have a stronger focus on the family than services for school age children with disabilities and because the majority of early intervention services are provided in the home. NEILS data have not yet been analyzed to look specifically at issues related to family poverty and welfare reform but some preliminary findings underscore the points being made by Rosman, Yoshikawa and Knitzer. From NEILS, we know that 26% of families of infants and toddlers receiving early intervention have annual household incomes of less than $15,000 a year. Another 16% have annual incomes of less than $25,000. One in four families receiving early intervention had received welfare in the past year. Limited income and a baby with a disability were not the only stressors in the lives of families with household incomes of less than $15,000 a year. Thirty percent of the mothers in these families were employed; 22% had one or more other children with special needs; and 39% had only one adult in the household. These statistics apply to the families who actually began early intervention services. We have no data on how many low income families never even accessed services for which their child was eligible.

More research is needed to understand the complex interplay of policy, family issues and child development, but with regard to children and youth with disabilities in low income families, we already know we have a group of children at high risk for poor developmental outcomes. As policy-makers approach the reauthorization of PRWORA and IDEA, the choices they make will either increase or decrease those risks.

For more information about NEILS, SEELS and NLTS2, see http://www.sri.com/neils/, http://www.seels.net/index.html, *and* http://www.sri.com/nlts2/.

highlighted above are beginning to do this. Other important research directions include:

1. Research on the prevalence of childhood disability among families who receive welfare.
2. Research on the impact of systems outside of the family on the development of children with disabilities within the context of PRWORA. What is the impact of maternal employment, especially if it is mandated and not voluntary? What is the impact of child care, particularly low quality child care?
3. Research on the ways in which the developmental mechanisms outlined here actually operate for families. What demands do families face, and what resources are available to meet those demands? How do families construct and sustain workable routines, and what components of those routines do families value the most? How do these two mediators specifically relate to child development, especially for children with special needs?

Finally, although more research is necessary to craft appropriate policies, preliminary policy recommendations are presented here. They recognize the unique needs and situations of families who are in poverty and have children with disabilities, and they involve changes in the federal law, as well as changes in practice in local TANF offices.

1. Implement screening and assessment strategies to include childhood disability as well as family strengths.

There is growing recognition of the importance of effective screening and assessment of TANF recipients, in order to identify both needs and strengths that are relevant to an individual's ability to maintain employment (National Center for Children in Poverty, 2001; Rosman et al., 2001; Thompson & Mikelson, 2001). However, there is very little information available about whether or not states are screening for childhood disability and, if so, what types of tools they are using. For many families, this is a very delicate subject, and the results of a screening can be biased by language/cultural barriers, by the belief parents have that they will be considered "bad parents" if they reveal that their child has behavior problems or a disability, or fear of being referred to child protective services (Harry, 1992; O'Connor, 1999; Rosman et al., 2001).

However, it is vital to get an accurate picture of childhood disability. Assessments could incorporate information on developmental needs of children, the demands placed on the family by such needs, and the family's capacities to respond. This is currently being done in Iowa, where individuals identify personal and family strengths and needs and then bring those to their discussions with caseworkers (Rosman et al., 2001). Just as "families on welfare" would not be considered a monolithic group, so "families who have children with disabilities" would not, either, and there would be recognition that some families, due to their child's demands, have a greater need for flexibility and accommodation than others. This would allow for the creation of individual plans that would allow the family to better balance the demands of work and disability-related caregiving.

Families must be educated about what services they are, in fact eligible for. This may require a change on the ground level of implementation—in welfare offices.

2. Create broader definitions of what qualifies as work

Changes in definitions of work are being widely suggested by advocates for many different groups that are considered hard to serve (Derr, Hill & Pavetti, 2000; Rosman et al., 2001). Flexible work requirements can take into account families' unique constellations of stresses and strengths, as well as they way that families organize their lives, creating solutions that decrease families' levels of stress and increase families' coping and abilities to maintain balance and routine. Some states offer "model" programs that we can draw from in this area. For example, in Washington State, if a WorkFirst participant is unable to find or keep employment because of a child with special needs, a referral is made to the local Public Health Department. A Public Health Nurse conducts an assessment geared toward the impact of the child's special needs on the parent's ability to participate in Work First. The Nurse then works with the individual's case manager to identify creative and workable activities for the parent. These could include taking a child to therapy appointments (Rosman et al., 2001).

Changes in work definitions may require TANF agencies to identify and partner with agencies that have experience serving individuals and families with barriers to work (Pavetti et al., 2001; Rosman et al., 2001, Zedlewski & Loprest, 2001). An example cited by Zedlewski and Loprest (2001) and Rosman and Knitzer (2001) is Project Match, a

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program that uses the concept of an incremental ladder of economic independence to meet women "where they are," providing them with attainable goals and a clear course to follow (Herr, Halpern, & Majeske, 1995). In Nashville, TN, Project Match's case management tool, Pathways, is used to create definitions of work that include such activities as going to medical appointments, taking children to extra-curricular activities, and serving on tenant management boards.[4] If this type of model were applied to families who have children with disabilities, activities that could be added would include: attending an Individualized Family Service Plan (IFSP); feeding a child with a feeding tube (which can take an hour every three hours); or training a child care provider about a child's disability.

3. Revisit implementation of time limits and exemption policies

Should families with children with disabilities be subject to time limits for welfare receipt? Currently, there is some discussion of abandoning time limits, or at least expanding the current 20% exemption option, so that states would have more time to help families work towards independence, providing them the supports necessary for working towards self-sufficiency (Bernstein & Greenberg, 2001; Haskins & Blank, 2001).

When exemptions are in place, it is vital that they be more clearly defined and implemented. There is mounting evidence that exemption policies, stated in the law, are not necessarily implemented on the "front-lines" in welfare offices. In Massachusetts, although parents caring for children with disabilities are exempted from time limits, work requirements, and sanctions, a recent study found that this was almost never implemented. Individuals who might qualify were not being identified, and local offices were taking the exemption to mean that a parent had to be caring for the child 24 hours each day (Family Economic Initiative & Massachusetts Law Reform Institute Time Limit Documentation Project, 1999).

Attempting to solve this problem requires clearer definitions of exemptions and extensions. In addition, special efforts may be needed to insure that TANF case workers are not only well informed about the policies, but also "buy in" to them, so that they can begin to more effectively identify families who have children with disabilities. This might entail special training sessions for caseworkers or holding town hall-style meetings, in which welfare recipients who have children with disabilities are invited to share their stories and their life situations with groups of caseworkers. It also requires better screening and assessment practices, as described above.

4. Increase affordable, good quality child care for children with disabilities

There are several mechanisms that have been suggested (see, for example, Rosman et al., 2001). First, creative and flexible approaches to funding (Whitney, Groginsky, & Poppe, 1999) can be implemented, such that money is pulled from multiple sources to build states' capacities for serving children with special needs. This entails making funding streams "less categorical and less rigid" (Besharov & Samari, 2001). Second, child care subsidies for families with children with disabilities could reflect market rates for children with special needs (LeRoy, 2000). Finally, increasing resources for training child care providers about the needs of children with disabilities would give providers access to experts in the disability field, so that more children can be served in inclusive settings (Sweeney et al., 2000).

5. Work to insure that families receive the supports for which they are eligible. For children with disabilities and their families, SSI is especially relevant, although, as for all families, Medicaid, Food Stamps, and the Earned Income Tax Credit are also highly relevant.

The first action required to meet this goal is maintaining funding for these programs and not converting Food Stamps to a block grant, as was widely debated during the drafting of PRWORA (Greenstein & Guyer, 2001). Beyond that, families must be educated about what services they are, in fact eligible for. Again, this requires a change on the ground level—in welfare offices. Other systems which come in contact with families in poverty could also be educated about these supports. For example, early intervention or special education caseworkers and service coordinators should be aware of poverty-related services so that they can help families access the supports for which they are eligible (Knitzer, 2000). Conversely, PRWORA caseworkers could help make sure that children with disabilities in low income families are identified and get the services for which they are eligible. Part C of IDEA specifically calls for identifying, evaluating, and meeting the needs of underrepresented populations, particularly "minority, low-income, inner-city, and rural populations" (P.L. 105-117; §631 (b)). Focused screening and assessments concerning child disability and family response, paired with increased training for casesworkers regarding pertinent issues, would be an excellent mechanism for meeting that mandate.

6. Increase inter-agency coordination among agencies serving the same families.

There is an increasing call for recognizing that families, particularly poor families, are often receiving services from multiple agencies. These agencies often bring with them multiple and, at times, competing demands (Rosman et al., 2001; Woolverton, McCarthy, Schibanoff, & Schulzinger, 2000). If these agencies were to collaborate in a more formal way, that could result in increased efficiency, decreased duplication of services, as well as the creation of strategies that, by recognizing all of the demands on a family, are more likely to result in a family's success in achieving independence (Sussman, 2000). Strategies that have been documented or suggested for achieving higher levels of coordination and collaboration include; a) co-locating Child Find workers or disability experts in welfare offices, as well as sharing records between welfare offices and early intervention/special education systems (with parental consent) (Rosman & Knitzer, 2001; Rosman et al., 2001); b) setting up systems so that representatives of the multiple agencies that serve families on TANF communicate on a regular basis (Derr, Hill & Pavetti, 2000); and c) allowing families to have one family service plan that would incorporate goals from multiple systems, so that families are treated in a more holistic fashion and are not subjected to demands that compete with or work at cross-purposes with each other (Rosman et al., 2001; Woolverton et al., 2000).

Through increased coordination between welfare, early intervention, and special education systems, families with children with disabilities might no longer fall through the cracks between the welfare and early intervention systems. It would be clear to both systems, for example, that a mother who needs to be home for morning home-based early intervention services cannot report to a work placement at 9 AM. This type of coordination would discourage the imposition of demands that cannot reasonably be met.

Conclusions

As attention turns to reauthorization and beyond, more attention must be paid to the question of how special populations are affected by welfare and anti-poverty policies. One such population that has been largely ignored is that of families who receive welfare have children with disabilities. The evidence marshalled in this paper suggests that they are likely to be affected by welfare reform in ways that differ importantly from those of other welfare recipients. The implications concern not only potential changes in the structuring of incentives in welfare policy, such as exemptions, but changes in implementation, most crucially in areas of assessment, training, and service delivery. We aimed to outline the scope of the challenge to researchers and policy makers, in order to improve the nation's response to a population that has been overlooked for too long in welfare and anti-poverty policy debates.

Footnotes

[1] For more detailed information about each of these categories, see the National Information Center for Children and Youth with Disabilities (NICHCY) publication entitled Disabilities that qualify children and youth for special education services under the Individuals with Disabilities Education Act (IDEA). This is available by calling (800) 695-0285 or on their website: http://www.nichcy.org.

[2] Though states may not penalize a parent for not working if the parent has a child under six and cannot receive needed care, there is concern that this section of the law is ill-defined and is not being applied consistently by caseworkers (Gong et al., 1999).

[3] When examining parenting and its effects in families in poverty, it is important to bear in mind recent criticisms which suggest that mainstream notions of nurturant parenting are typically based on studies of White, middle-class populations and may not be appropriate for all populations, particularly populations experiencing the demands of poverty (Halpern, 1990).

[4] For more information concerning Project Match and the Pathways System, including examples of successful implementation, see Project Match's website: http://www.pmatch.org.

References

Alpern, L. & Lyons-Ruth, K. (1993). Preschool children at social risk: Chronicity and timing of maternal depressive symptoms and child behavior problems at school and at home. *Development-and-Psychopathology, 5*, 371-387.

Bazelon Center for Mental Health Law. (2000, January 13). *Children's SSI program*. [On-line]. Available: http://www.bazelon.org/kidsssi.html

Beckman, P.J. (1983). The influence of selected child characteristics on stress in families of handicapped infants. *American Journal of Mental Deficiency, 88*, 150-156.

Berlin, G. (Summer, 2001). The 30-year tug-of-war: Can reform resolve welfare policy's thorniest conundrum? *Brookings Review: Welfare reform and beyond, 19*, 34-38.

Bernstein, J., & Greenberg, M. (2001). Reforming welfare reform. *The American Prospect, 12* (1).

Besharov, D.J., & Samari, N. (2001). Child care after welfare reform. In R. Blank & R. Haskins (Eds.), *The new world of welfare*, (pp. 461-481). Washington, D.C.: Brookings Institution Press.

Bos, J.M., Huston, A.C., Granger, R.C., Duncan, G.J., Brock, T.W., & McLoyd, V.C. (1999). *New Hope for people with low incomes: Two-year results of a program to reduce poverty and reform welfare*. New York: Manpower Demonstration Research Corporation.

Boyce, G.C., Behl, D., Mortensen, L., & Akers, J. (1991). Child characteristics, family demographics, and family processes: Their effects on the stress experienced by families of children with disabilities. *Counselling Psychology Quarterly, 4*, 273-288.

Bradley, R.H., Rock, S.L., Whiteside, L., Caldwell, B.M., & Brisby, J. (1991). Dimensions of parenting in families having children with disabilities. *Exceptionality, 2*, 41-61.

Children's Defense Fund. (2000). *Families struggling to make it in the workforce: A post welfare report*. Washington, D.C.: Author. [On-line]. Available: http://www.childrensdefense.org/pdf/CMPreport.pdf

Danziger, S., Corcoran, M., Danziger, S., Heflin, C., Kalil, A., Levine, J., Rosen, D., Seefeldt, K., Siefert, K., & Tolman, R. *Barriers to the employment of welfare recipients*. (2000). Ann Arbor, MI: University of Michigan. [On-line]. Available: http://www.ssw.umich.edu/poverty/pubs.html

Derr, M.K., Hill, H., & Pavetti, L. (2000). *Addressing mental health problems among TANF recipients: A guide for program administrators*. Washington, D.C.: Mathematica Policy Research, Inc. [On-line]. Available: http://www.mathematica-mpr.com

Downey, G. & Coyne, J.C. (1990). Children of depressed parents: An integrative review. *Psychological Bulletin, 108*, 50-76.

Dyson, L. (1993). Response to the presence of a child with disabilities: Parental stress and family functioning over time. *American Journal on Mental Retardation, 98*, 207-218.

Edin, K., & Lein, L. (1997). *Making ends meet: How single mothers survive welfare and low-wage work*. New York: Russell Sage Foundation.

Elder, G., Liker, J., & Cross, C. (1984). Parent-child behavior in the Great Depression: Life course and intergenerational influences. In P. Baltes & O. Brim (Eds.), *Life-span development and behavior* (Vol. 6, pp. 109-158). Orlando, FL: Academic Press.

Elder, G., Ngyuen, T., & Caspi, A. (1985). Linking family hardship to children's lives. *Child Development, 56*, 361-375.

Family Economic Initiative & Massachusetts Law Reform Institute Time Limit Documentation Project. (1999, February 9). *A closer look at the Massachusetts families hitting the TAFDC two-year clock*.

Family Voices. (1998, Spring). *Children's SSI status update*. [On-line]. Available: http://www.familyvoices.org/fs/ssiupdate98.html

Featherstone, H. (1981). *A difference in the family*. London: Penguin.

Fix, M. & Passel, J. (2002). *The scope and impact of welfare reform's immigrant provisions*. Washington, DC: The Urban Institute. [On-line]. Available: http://newfederalism.urban.org/html/discussion02-03.html

Frey, K.S., Greenberg, M.T., & Fewell, R.R. (1989). Stress and coping among parents of handicapped children: A multidimensional approach. *American Journal on Mental Retardation, 94*, 240-249.

Friedrich, W., & Friedrich, N. (1981). Psychological assets of parents of handicapped and non-handicapped children. *American Journal of Mental Deficiency, 85*, 551-553.

Fujiura, G.T., & Yamaki, K. (2000). Trends in demography of childhood poverty and disability. *Exceptional Children, 66*, 187-199.

Gallimore, R., Bernheimer, L.P., & Weisner, T.S. (1999). Family life is more than managing crisis: Broadening the agenda of research on families adapting to childhood disability. In R. Gallimore, L.P. Bernheimer, D.L. MacMillan, D.L. Speece, & S. Vaughn (Eds.), *Developmental perspectives on children with high-incidence disabilities* (pp. 55-80). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Gennetian, L., & Miller, C. (2000). *Reforming welfare and rewarding work: A summary of the final report on the Minnesota Family Investment Program, Volume 2: Effects on Children*. NY: Manpower Demonstration Research Corporation.

Gong, J.A.C., Bussiere, A., Light, J., Scharf, R., Cohan, M., & Leiwant, S. (1999). Child care in the postwelfare reform era: Analysis and strategies for advocates. *Clearinghouse Review*. [On-line]. Available: http://www.welfarelaw.org/chcc.htm

Greenstein, R., & Guyer, J. (2001). Supporting work through Medicaid and Food Stamps. In R. Blank & R. Haskins (Eds.), *The new world of welfare*, (pp. 335-368). Washington, D.C.: Brookings Institution Press.

Halpern R. (1990). Poverty and early childhood parenting: Toward a framework for intervention. *American Journal of Orthopsychiatry, 60*, 6-18.

Harbin, G.L. (1998). Welfare reform and its effects on the system of early intervention. *Journal of Early Intervention, 21*, 211-215.

Harry, B. (1992). Making sense of disability: Low-income, Puerto Rican parents' theories of the problem. *Exceptional Children, 59*, 27-40.

Haskins, R., & Blank, R.M. (2001). Welfare reform: An agenda for reauthorization. In R. Blank & R. Haskins (Eds.), *The new world of welfare*, (pp. 3-32). Washington, D.C.: Brookings Institution Press.

Haskins, R., Sawhill, I., & Weaver, K. (2001). Welfare reform reauthorization: An overview of problems and issues. *Brookings Institute Policy Brief 2*. Washington, D.C.: The Brookings Institute. [On-line]. Available: http://www.brookings.edu/wrb

Hauser-Cram, P., Warfield, M.E., Shonkoff, J.P., & Krauss, M.W. (2001). Children with disabilities. *Monograph of the Society for Research in Child Development*.

Herr, T., Halpern, R., & Majeske, R. (1995). Bridging the worlds of Head Start and welfare-to-work: Building a two-generation self-sufficiency program from the ground up. In S. Smith (Ed.), *Two Generation Programs for Families in Poverty: A New Intervention Strategy* (pp. 161-197). Norwood, NJ: Ablex.

Huston, A.C., Duncan, G.J., Granger, R., Bos, J., McLoyd, V., Mistry, R., Crosby, D., Gibson, C, Magnuson, K., Romich, J., & Ventura, A. (2001). Work based anti-poverty programs for parents can enhance the school performance and social behavior of children. *Child Development, 72*, 318-336.

Huston, A.C., McLoyd, V.C., & Garcia Coll, C. (1994). Children and poverty: Issues in contemporary research. *Child Development, 65*, 275-282.

BEST COPY AVAILABLE

Janko-Summers, S. (1998). Making sense of early intervention in the context of welfare to work. *Journal of Early Intervention, 21*, 207-210.

Kalil, A., & Eccles, J.S. (1998). Does welfare affect family processes and adolescent adjustment? *Child Development, 69*, 1597-1613.

Karoly, L.A., Klerman, J.A., & Rogowski, J.A. (2001). Effects of the 1996 welfare reform changes on the SSI program. In R. Blank & R. Haskins (Eds.), *The new world of welfare*, (pp. 482-499). Washington, D.C.: Brookings Institution Press.

Kearney, J.R., Grundmann, H.F., & Gallicchio, S.J. (1994). The influence of social security benefits and SSI payments on the poverty status of children. *Social Security Bulletin, 57*, 27-43.

Knitzer, J. (2000). *Promoting resilience: Helping young children and parents affected by substance abuse, domestic violence, and depression in the context of welfare reform.* New York, NY: National Center for Children in Poverty. [On-line]. Available: http://cpmcnet.columbia.edu/dept/nccp/cwr8.pdf

Knox, V., Miller, C., & Gennetian, L.A. (2000). *Reforming welfare and rewarding work: A summary of the final report on the Minnesota Family Investment Program, Volume 1: Effects on Adults.* Washington, D.C.: Manpower Demonstration Research Corporation.

LeRoy, B. (2000). *The effects of welfare reform and children's health insurance on families whose children have disabilities.*

London, A.S., Scott, E.K., Edin, K., & Hunter, V. (2000). *Ethnographic perspectives on welfare to work transitions, work-family tradeofs, and children's well-being.* Paper presented at the 22nd Annual Research Conference of the Association for Public Policy Analysis and Management, Seattle, Washington.

Loprest, P., & Acs, G. (1996). Profile of disability among families on AFDC. Washington, D.C.: The Urban Institute.

Margalit, M., & Ankonina, D.B. (1991). Positive and negative affect in parenting disabled children. *Counselling Psychology Quarterly, 4*, 289-299.

McLoyd, V.C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development, 61*, 311-346.

McLoyd, V.C. & Wilson, L. (1991). The strain of living poor: Parenting, social support, and child mental health. In A.C. Huston (Ed.), *Children in poverty: child development and public policy* (pp. 105-135). Cambridge: Cambridge University Press.

McNeil, J.M. (1997). *Americans with disabilities.* Current Population Reports, P70-61. Washington, D.C.: Bureau of the Census, U.S. Government Printing Office.

Meyers, M.K., Brady, H.E., & Seto, E.Y. (2000). *Expensive children in poor families: The intersection of childhood disabilities and welfare.* San Francisco, CA: Public Policy Institute of California. [On-line]. Available: http://www.ppic.org/publications/PPIC140/index.html

Meyers, M.K., Lukemeyer, A., & Smeeding, T.M. (1996). Work, welfare, and the burden of disability: Caring for special needs of children in poor families. *Income Security Policy Series, Paper No. 12.* Syracuse, NY: Center for Policy Research, Maxwell School of Citizenship and Public Affairs, Syracuse University.

Miller, C., Knox, V., Gennetian, L.A., Dodoo, M., Hunter, J.A., & Redcross, C. (2000). *Reforming welfare and rewarding work: Final report on the Minnesota Family Investment Program, Volume 1: Effects on adults.* New York: Manpower Demonstration Research Corporation. [On-line]. Available: http://www.mdrc.org/Reports2000/MFIP/MFIP-Vol-1-Adult.pdf

National Center for Children in Poverty. (2001). Screening is key to putting poor families on the road to economic self-sufficiency. *NCCP News and Issues, 11* (1), 7-8.

Newacheck, P., Jameson, W.J., & Halfon, N. (1994). Health status and income: The impact of poverty on child health. *Journal of School Health, 64*, 229-233.

O'Connor, M.A. (1999). Many TANF recipients are eligible for SSI. *Youth Law News, 20*, 18-22.

Ohlson, C. (1998). Welfare reform: Implications for young children with disabilities, their families, and service providers. *Journal of Early Intervention, 21*, 191-206.

Pavetti, L., Strong, D., Bajaj, R., Jacobson, J., Lloyd, C., Nagatoshi, C., Rosso, R., & Stieglitz, A. (2001). *Work-based strategies for hard-to-employ TANF recipients: A preliminary assessment of program models and dimensions.* Washington, D.C.: Mathematica Policy Research, Inc. [On-line]. Available: http://www.mathematica-mpr.com/PDFs/workbasedTANF.pdf

Park, J., Turnbull, A.P., & Turnbull, H.R. (2002). Impacts of poverty on quality of life in families of children with disabilities. *Exceptional Children, 68*, 151-170.

Relave, N. (1999). Moving from welfare-to-work: An overview of work participation issues. *Welfare Information Network Information Note, 3* (7). [On-line]. Available: http://www.welfareinfo.org/nanetteissue.htm

Rosman, E.A. & Knitzer, J. (2001). Welfare reform: The special case of young children with disabilities and their families. *Infants and Young Children, 13*, 25-35.

Rosman, E.A., McCarthy, J., & Woolverton, M. (2001). *Focusing on families in welfare reform reauthorization: Adults with mental health needs and children with special needs.* Georgetown University: Washington, D.C.

Rosman, E.A., & Yoshikawa, H. (2000). How families experience welfare reform: A focus group study. Prepared for the Statewide Parent Advocacy Network (SPAN), Newark, NJ. [On-line]. Available: http://www.spannj.org

Scorgie, K., Wilgosh, L., & McDonald, L. (1998). Stress and coping in families of children with disabilities: An examination of recent literature. *Developmental Disabilities Bulletin, 26*, 22-42.

Scorgie, K., Wilgosh, L., & McDonald, L. (1996). A qualitative study of managing life when a child has a disability. *Developmental Disabilities Bulletin, 24*, 68-90.

Seligman, M., & Darling, R.B. (1989). *Ordinary families, special children: A systems approach to childhood disability.* New York: Guilford Press.

Shearn, J., & Todd, S. (2000). Maternal employment and family responsibilities: The perspectives of mothers of children with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities, 13*, 109-131.

Smith, T.B., Oliver, M.N.I, & Innocenti, M. (2001). Parenting stress in families of children with disabilities. *American Journal of Orthopsychiatry, 7*, 257-261.

Stoneman, Z.,& Manders, J.E. (1998). Partnerships with families. In W. Umansky and S.R. Hooper (Eds.), *Young children with special needs*, (pp. 72-93). New Jersey: Prentice-Hall, Inc.

Sussman, T. (2000). Interagency collaboration and welfare reform. *Welfare Information Network Issue Note, 4* (1). [On-line]. Available: http://www.welfareinfo.org/crosscuttingTara.htm

Sweeney, E., Schott, L., Lazere, E., Fremstad, S., Goldberg, H., Guyer, J., Super, D., & Johnson, C. (2000). *Windows of opportunity: Strategies to support families receiving welfare and other low-income families in the next stage of welfare reform.* Washington, D.C: Center on Budget and Policy Priorities. [On-line]. Available: http://www.cbpp.org/1-12-00wel.htm

Thompson, T.S., & Mikelson, K.S. (2001). *Screening and assessment in TANF/Welfare-to-work.* Washington, D.C.: The Urban Institute. [On-line]. Available: http://www.urban.org

Weil, A., & Holahan, J. (2001). Health insurance, welfare, and work. *Welfare reform and beyond, 11.*

76 BEST COPY AVAILABLE

Weisner, T.S., Matheson, C.C., Bernheimer, L.P. (1996). *American cultural models of early influence and parent recognition of developmental delays: Is earlier always better than later?* In S. Harkness & C.M. Super (Eds.), *Parents' cultural belief systems: Their origins, expressions, and consequences* (pp. 496-531). New York: Guilford.

Whitney, T., Groginsky, S., Poppe, J. (1999, January). Funding inclusive child care. *National Conference of State Legislators State Legislative Report, 24*, 1-10. [On-line]. Available: http://www.ncsl.org/programs/cyf/FICCCslr.htm

Woolverton, M., McCarthy, J., Schibanoff, S., & Schulzinger, R. (2000). Welfare reform: *Exploring opportunities for addressing children's mental health and child welfare issues*. Washington, D.C.: National Technical Assistance Center for Children's Mental Health, Center for Child Health and Mental Health Policy, Georgetown University Child Development Center. [On-line]. Available: http://www.georgetown.edu/research/gucdc/wfpub.html

Yoshikawa, H., Magnuson, K., Bos, H., & Hsueh, J. (2002). *Effects of welfare and anti-poverty policies on adult economic and middle-childhood outcomes differ for the "hardest to employ."* Working paper, Joint Center for Poverty Research and the Next Generation research consortium.

Yoshikawa, H., & Hsueh, J. (2001). Child development and public policy: Toward a dynamic systems perspective. *Child Development, 72*, 1887-1903.

Zedlewski, S.R. (1999). *Work activity and obstacles to work among TANF recipients*. Washington, D.C.: The Urban Institute.

Zedlewski, S.R., & Brauner, S. (1999a). *Declines in food stamp and welfare participation: Is there a connection?* Washington, D.C.: The Urban Institute.

Zedlewski, S.R., & Brauner, S. (1999b). *Are the steep declines in food stamp participation linked to falling welfare caseloads?* Washington, D.C.: The Urban Institute.

Zedlewski, S.R., & Loprest, P. (2001). Will TANF work for the most disadvantaged families? In R. Blank & R. Haskins (Eds.), *The new world of welfare*, (pp. 311-334). Washington, D.C.: Brookings Institution Press.

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